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Ἰητρὸς γὰρ ἀνὴρ πολλῶν ἀντάξιος ἄλλων.

Ilias, Lib. xi. 514.

Corpus humanum, arte prorsus divina fabricatum, multis et miris fungitur muneribus; quorum alia ad res externas, alia ad seipsum tantum pertinent.—

Conspectus Medicinæ Theoreticæ.

Medicamenta bona recte adhibita salutem promittunt: et mala, vel male composita funesta multa adferunt, vel nil Ægrotantibus proficiunt.—

Pharmacopeia Edinensis.

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ORIGINAL COMMUNICATIONS.

THE MEDICAL PROFESSORS OF THE UNIVERSITY OF GLASGOW—DR. JEFFRAY.

Few subjects in a *Medical Journal* are more interesting to the reader than delineations of Medical Professors: the eagerness with which the lively miniatures of *Scotus* have been perused, the interest with which the additional lights and shadows of Edinensis are anticipated, are proofs of this assertion.

Who is there amongst us of the profession that would not contribute his mite to add, if possible, to the welfare, and permanent success of your long-wanted, and now highly appreciated *Journal of Medical Science*? that would not venture to pluck a flower to chaplet her brows at the risk of pricking his fingers, or gather berries from a thorny path to throw into her lap? that would not skim the mountain may-day dew to pour out in libations before her, or distil the volatile aroma, from herbs of sweetest perfume, to scent the atmosphere in which she moves? With such feelings as these, I have been induced to enter upon my present task;—if I should fail in performing it, I shall still have secured this advantage, of having whiled away a dreary, dull, monotonous, solitary hour at the most out of-the-world station in the Mofussil; where the whole country, even till this late season is a waving ocean; amidst storms, and rains, and damps, that seem as if they would dissolve the little remaining material still above water.

Though I underwent my diplomatic ordeal in the corner of Surgeon's Square, and might be able to fall in with a subject or two in the metropolis; yet I have no idea of encroaching upon ground already so well occupied. I shall break cover in a distant field, as yet untouched, and shall fancy myself once more in the sister metropolis of the West, in the University of Glasgow, sacred to the manes of Black, and Cullen, and Hunter, and Simson, and Adam Smith; and shall, with your patience, endeavour to bring before the mind's eye the oracles of that ancient College.

Medical Professors occupy almost the same place in the system of professional knowledge, that the glands do in the animal economy. It is by them that all our Hippocratical skill is absorbed from the crude mass of indigestible material, in whose mental organization the vital nourishment is generated; and from whom it is secreted, and prepared for administration: And according as these organs are open to the flow of reason, or obstructed by tissues of prejudice, according as they are free from the excoriations of envy and spite, the excrescences of ignorance and opposition, or the tortuosities of indolence and selfishness; according as they possess that nice discrimination, that vis medicatrix naturæ, what to choose, what to reject, as consistent with the healthy nourishment of the infant Esculapian, or baneful to his indiscriminating palate, so in like proportion, do the thoughts, the words and the actions, of a Professor operate upon his class. Hence the constituent parts of a Professor, his natural, his moral, his intellectual economy, form a prominent part in comparative anatomy, and a proper study for the disciples of Galen. Though such subjects for discussion are not indigenous in Hindostan, yet they are, nevertheless, procurable. We have already seen three produced upon your table, and heard them demonstrated; and have the promise of several more from the same quarter. True enough they have been laid open alive, *mente sana in sano corpore:* and on that account the fastidious may object and the tender-hearted may deprecate; but this is unavoidable in the demonstration of men of genius: for such men never die.

DR. JEFFRAY.

Dr. Jeffray was, in my time, the professor of oldest standing in the University; emphatically called the head of the College, having filled the anatomical chair for upwards of forty years. In his hey-day of youth he must have been a very handsome, and a very fine-looking man—perhaps a perfect model of the human species; and in any disputed point of feature, form, or proportion, that might have occurred in his demonstrations, for so long a period; he might, with justice, have appealed to his own person for a decision. Though the busy fingers of Time had thinned his locks, and sprinkled its heavy frost work over the remainder—though the labour of nearly half a century had furrowed his cheek, and dimmed his eye, and relaxed the spring and elasticity of his gait; yet he had lost nothing of his free contour and fair proportions.

His dress, far from being that of a sloven, was equally distant from that a beaux, and in fine taste and keeping with his graceful person and reverend demeanour, and without the least variation during a season, consisted of a black coat and waistcoat, and black

pantaloons, a white neckcloth, and a fair display of snow-white linen. He was more partial to boots, than is the case with more individuals of his years, and when he did throw them aside upon a sunshiny day, a slight pump with a black silk sock told that he had no occasion to conceal his ankle. The only ornament he wore, was a cane, mounted with silver, and a plain gold ring on one of his fingers.

On a first interview, a stranger felt impressed with the highest respect and almost veneration for so worthy a personage. Nor was this prepossession altered on more familiar intercourse; on the contrary, it was increased, and the student was too apt to feel in his presence the same restraint and uneasiness throughout, that a school-boy does on his first addressing his new master. Some, indeed, felt this so acutely, as to complain of it as intentional coldness and reserve; as an unbending effort to maintain his professional hauteur at the expence of the ease and the feelings of others. It was not the students only that felt their inferiority in his presence; his assistants —and even his own sons—seemed enveloped in the same spell, and waited upon his every look with profound submission. Nor was this awe extorted by harshness or any attempt to overbear: for in his addresses to his assistants he was mild and ever respectful, and to his class affectionate and conciliating.

His Lectures were characterized by their purity of style and chasteness of composition; and though generally before him in stenography, had all the ease and fluency of being extemporary. His voice, though a note or two above the tenour of his grand climacteric, was still firm and commanding: and so closely had his pronounciation kept pace with the prosody of the day, that we could trace its connexion with the times of our grandfathers, only by an aspirate or an accent. During the sessions that I attended his class, I dont remember ever having seen him laugh; and once only smile: and that was a smile of dissatisfaction, when he was baffled in attemping to lift the jaw of a hippopotamus upon the table. Nor can I account for this by moroseness or melancholy, by neither of which he was influenced; yet, so calm, still, and unagitated were his features—so little sympathetic with the vanity of this world—so unruffled by passion—and so passively active, that one could almost have fancied him imbued with the repose of the subjects constantly before him.

In the early part of his course he was perhaps more instructive than amusing. The demonstration of dry bones with their fissures, their processes, and foramina; and flabby muscles with their origins and insertions; the veins with their valves, the nerves with their ganglia, and plexuses, and the absorbents, with their nameless glands, seemed to be irksome and laborious, even to himself; and the junior student might have profited more by a teacher with not a handful of his knowledge. But when the recent subject was removed—when the table was loaded with mercurial preparations—when he had hung up his gown upon its peg, and entered upon his favourite field, physiology, and with his golden spectacles raised upon his forehead;—scanned the hundreds that sat uncovered before him eager for his commencement—then he became truly great, and bore all along with him in a flood of eloquence. Though Physiology was rather a hobby of his, yet he was not partial to any particular department: thus carrying the attention of his hearers continually along with him, without allowing the attention to wander while he dwelt elaborately upon a favourite branch. Comparative Anatomy occupied a considerable share of his attention, and the readiness with which he traced the modifications of the vital organs through all kinds of inferior animals, shewed the extent of his dissections and his studies. One thing he had always in mind—namely to point out the handiwork of the Supreme Being in the exquisite construction of these organs, their admirable perfection in performing the peculiarity of the work allotted them: and to shew the absurdity of attempting to account for their production by blind chance. From no subject did he draw more conclusions than from the fœtal circulation:—and he did it ample justice. During the course a splendid set of preparations injected with mercury, and preserved in spirits of wine, were circulated through the class, elucidating his doctrines. These were supplied both from his own private laboratory and from the Hunterian museum.

Story-telling was one of the Doctor's fortés; and well he knew how to season the insipidity of a dry demonstration by some anecdote or another; commonly from his own experience or observation. These stories, in course of time, acquired a place in the lecture, and many of them were annually repeated, as the bone or the muscle was described with which they were connected. Whenever a sudden pause ensued, followed with a look round the very spacious and elegant class-room (perhaps the most elegant class-room in Britain!) a stretching of the back, and a perceptible shrug of the shoulders, we knew something good was coming, and were all attention. It might be that many of us had heard the same story before; but he had a knack of varying the edition, and contrived to secure all the interest of an original. These anecdotes were very humorous at times, and convulsed the class with laughter: yet the Professor never once stretched a muscle: they were always amusing—for the most part instructive, and many of them are now remembered when the parts that gave rise to them are forgotten. One I remember connected with the round ligament of the femur. Amongst other practitioners (for Dr. Jeffray was once in extensive practice) the doctor was called to a patient that had dislocated his hip. Various manipulations were tried to reduce it, but with no avail. One of the surgeons, a stout powerful man, as a last resource, took hold of the limb, and with both hands endeavoured to reduce it by making extension, but failed. After all his exertions, tired and nearly angry, he threw the limb from him, saying it would never be reduced, when that instant a sudden snap was heard, and the limb re-

turned to its place of its own accord. On another occasion, while passing a public house, he was pounced upon, and pulled in to see a man that had got his nose cut off by a blow in the face from a bottle. His first enquiries were, Where is the nose? but no one had seen it, and all were too intent upon preventing the man from bleeding to death to look for it. It was a dark hovel of a place, and for some time he could not find the nose, and began to think on the Hudibrastic prescription, but at last, with the help of a candle, he found the nose lying in a corner, basted over with the sand that in such houses is strewed upon the floors *to keep them clean*. After washing it in a bason of tepid water, cleansing it from blood and earth, he planted it upon the face again, and secured it with stitches and plasters. Soon after it took root, and, in course of time, budded and bloomed as before, and in the doctor's own words 'The nose is a good nose to this day.'

Far from having his feelings hardened or rendered obtuse by so long an association with inanimate matter, as Professors of Anatomy sometimes are, and, indeed, as is consistent with vulgar opinion, he was gentleness and philanthropy itself; I never heard him utter a harsh expression or take advantage of the answers of the most blundering student to inflict a syllable that might tend to injure the most delicate sensibility. He was the last person in the world to become pompous, or egotistical; and so very sparing was he in the use of the I, that it was as seldom as possible heard. To his contemporaries he was always indulgent, and respectful to the memory of the great deceased;—and if he did find occasion to point out a mistake in the practice of the former, or an inconsistency in the doctrines of the latter, he always did it in such a manner as if the individual was seated before him, or restored again to life and fame.

Though his sphere of usefulness has hitherto been confined to his class-room, his laboratory and the bed-side of his patient; to my knowledge, he has never appeared before the world as an author; yet this is to be attributed to the comparative perfection of the anatomy of the human body, and the want of any thing new to communicate; for unless some grand discovery is made, no subject is less fruitful in inducement to publish than anatomy.

Seldom has it been the lot of any professor to fill a University chair for so long a period as Dr. Jeffray; few, indeed, could have maintained its respect and honour unsullied, to so advanced an age; and many successors may expect to take their curriculum before it be filled by another who will do more for the rising generation, or secure the approbation, the esteem, and the reverence of a greater number of the Medical profession. Though now full of years, and, by the course of nature, liable to the infirmities that 'flesh is heir to,' he moves, or perhaps has ceased to move, in the midst of a race to whom he was a stranger, and with whose habits he could have had but little sympathy, it may be some consolation in a lonely hour, if this should ever fall in his way, to see himself recorded in a foreign clime, by one who valued his instructions when under his eye, who has since, to the best of his abilities, endeavoured to follow them, and who, though many thousand miles removed from his alma mater, shall consider himself performing a debt of gratitude, ever to think of him with esteem and affection.

10th Oct. 1834. KIRKMICHAEL.

STUART'S CASES OF AMPUTATION.

To the Editors of the India Journal of Medical Science.

Gentlemen,—In the 5th and 7th numbers of your Journal, I observe an account of Nipál Amputations. Criminals are awarded the same punishment in this part of the world, and the following account of some cases, which lately came under my observation, may not be unacceptable:

In the month of July last, his highness the Guicwar's minister of justice, convicted and awarded punishment to numerous prisoners. Some were condemned to die, others mutilated and set at liberty. On the 21st of July, while several officers were engaged at a pigeon match, the first mutilated object presented himself. He seated himself on the ground, with a clotted stump on each knee, apparently more for the purpose of exciting commiseration than wishing assistance. Both his hands had been chopped off in the morning, and from the town of Baroda he had wandered into camp, a distance of about two miles. I had him conveyed to hospital, but before he arrived, the (distance being considerable,) he was for some time exposed to heavy rain. About nine hours had elapsed from the time his hands were cut off to the time he reached the hospital. He looked exhausted and haggard: pulse slow and feeble—no bleeding from the stumps, but occasionally a little serum dropt from the coagulated blood. Nothing had been done to prevent hemorrhage; nor did he now wish any thing to be done. He was contented to get under a roof where he could escape the rain and die comfortably. I ordered him some brandy with water, and examined the stumps. The left hand was hacked off at the carpus in so bungling a manner, that it had more the appearance of having been torn off than cut. One cut higher than the others penetrated the wrist joint and injured the ends of the radius and ulna. I had no hesitation in proposing immediate amputation, to which at first he refused to submit, preferring, he said, rather to die than live a burden to himself and others. Fortified, however, with some more brandy and water, which he earnestly called for, and which his exsanguinated state required, he consented. I removed the arm by the flap at the upper third of the fore-arm, only the radial and ulnar arteries required to be secured. I afterwards examined the other stump: it was likewise taken off at the carpus, but in a more carpenter-like style: the surface was regular, and probably had been separated at one blow: when washed

and wiped with a sponge, scarcely a drop of blood flowed. I proposed to take out the carpal bones at the wrist joint and leave skin sufficient to cover the ends of the bones. He would not consent to have it done then, and I did not urge him, as he was already much exhausted. Simple dressings were applied;—he had an anodyne draught and was put to bed. The following day he had much fever, and nothing was done to the right arm.

The fever continued for three days, and was followed by diarrhœa, which nearly proved fatal. Notwithstanding his bad state of health, the amputated arm healed by the first intention, and was quite well in twenty days. The right stump inflamed and fœtid sanies was discharged from the bones;—granulations sprung up, but so irritable, that the dressings gave him great pain. Finding that the amputated arm healed so quick, and that he could not sleep on account of the pain and irritability of the other, he wished to have it amputated likewise. I took it off by the flap, at the same place as the other, on the 13th of August. A pustular eruption with inflamuation of the integuments of the whole arm was the only unusual occurrence. He was well, and discharged on the 17th of September.

The next case was a man under the care of Assistant Surgeon Stovell. Two days after the loss of his hand he was taken into hospital. Nothing had been done to stop hemorrhage, and the only application was a dirty rag to keep away the flies. He never had fainted from loss of blood, nor did he describe the hemorrhage as much. The executioner had here also mistaken his aim: the hand was taken off just above the wrist joint. The sore looked healthy, with the splintered ends of the radius and ulna protruding. Amputation was proposed, but he would not consent.

From the 23d of July to the 16th of August simple dressings were only applied. Granulations sprung up, but without any appearance of covering the bones, which now protruded white and decayed, leaving no doubt but that they must slough before the stump healed. Amputation was again proposed and consented to. The limb was amputated by the flap in the middle of the forearm, and he was well and discharged on the 16th day.

The only other case I have had an opportunity of seeing was a man under the care of Assistant Surgeon Budds. His hand was taken off at the carpus: the surface was regular, and only two small specks of bone perceptible. He was not received into hospital till some days after he had lost his hand, but the only thing done or applied was, as in the former case, a piece of rag. He would not submit to amputation: nor was it insisted on, as granulations were springing up with every appearance of covering the bones and forming a tolerable stump. Simple dressings were only applied, and three months after, it healed, forming a conical stump covered with tender cuticle.

The above cases in conjunction with those by Mr. Campbell, in the 7th number of your Journal, prove, evidently, that there is little danger of fatal hemorrhage, from the radial and ulnar arteries. In the case under my charge, when both hands were cut off, the bleeding stopt nine hours after the amputation. The blunt hacking instrument employed, by bruising rather than cutting, may have, in some measure, contributed to this. But the chief preventative of fatal hemorrhage, in my opinion, is the excessive bleeding at first exhausting the strength of the circulation; so that small arteries removed from the heart are not supplied with blood, having sufficient impetus to remove the coagula and prevent contraction of the divided vessels. On this principle do we not bleed in hœmoptysis and other diseases? During the amputation of the first arm, after the patient had taken a considerable quantity of brandy, only two arteries bled, and they were more like the languid flow from a vein than the sharp spurt from an artery. As the arteries of the unamputated stump were not secured, I was apprehensive lest hemorrhage should take place with the return of a more powerful circulation, and ordered him to be carefully watched. Twelve hours after, he had a bounding pulse; but the efforts of nature proved effectual, and there was only a slight serous discharge. The natives of Nipál in their treatment only anticipate nature. They, by tight bandaging, partially obstruct the circulation; so that the blood at the stump is diminished in force and quantity. Dr. Koch's plan, as recommended by Mr. Bramley, is similar; but there is not much of novelty in it,—for, in the beginning of the 17th century, before the use of ligatures was generally known, *Verduin* recommended the flap operation, because the fleshy flap formed an excellent cushion with a bandage to press on the mouths of the bleeding vessels. Among the many late improvements in Surgery connected with this subject, *Torsion* of arteries, as recommended by M. Amusat, is particularly worthy of the attention of surgeons;—and when we know that such arteries as the femoral are effectually secured by simple *torsion*, we need not be surprised at the efforts of nature being sufficient to prevent fatal hemorrhage from such arteries as the radial and ulnar. In the 33d number of *Johnson's Medical Review* there are several cases of amputation where the arteries were secured by *torsion* with astonishing success. Mutilated arms, on account of the manner in which the Guicwar's executioners perform their duty, must generally require after-amputation, and the above cases show the advantages of it.—Amputation on healthy subjects is neither dangerous nor difficult; and the advantages of a good stump, particularly when the patient has been deprived of both hands, are paramount. When left to nature, these cases must require from ten to twelve weeks to heal; and when healed, they are scarcely of any service, the tender covering of cuticle being ruffled by the most trifling injury.

Here, as in Nipál, a common sweeper is the executioner, and both trial and punishment are got over in the most summary manner. The *judge* passes sentence, and the executioner, ready with an adze *(busoola)* blindfolds the culprit—places hand after hand on the block,

and at one, two, or three strokes, separates the condemned member. The victim to the offended laws of his country is then released and at liberty to wander where he listeth, a disgusting monitor to all transgressors. Theft is generally punished with the loss of one hand, but the man whose case is related above, and who lost both his hands, was, I have no doubt, a hardened villain, and, by his own confession, killed a man on account of some ancient feud. These punishments appear barbarous and disgusting in the eyes of Europeans ; and the history of Nipál patients, related by your correspondents, shows the futility of them. Nevertheless, if we reflect on the history of our own country, at no very distant period ; we may find some apology for the commission of these cruelties by an Asiatic potentate of the present day in *the full exercise* of despotic power.

P. Stuart.

Baroda Camp, Oct. 9th, 1834.

CASES ILLUSTRATIVE OF THE EFFECTS OF IODINE, USED EXTERNALLY.

To the Editors of the India Journal of Medical Science.

Dear Sirs,—The value of Iodine, as a remedy in discussing glandular tumors, be they of a peculiar nature as Goitre, or depending on a scrophulous habit of body, is firmly enough established among the European portion of the Medical world. The fact is sufficient for all purposes of relieving a portion of human misery. As to the mode of its action, it is now, and probably will remain, as inexplicable as most other physiological phenomena. I shall not bother myself, you, or your readers, with mystifying attempts at satisfactorily accounting for the curative powers of the drug, through the means of an explained *modus operandi*, but note the few cases of my small experience, to be added to those of other people.

Case 1st.—May 10th. Narayani, a Hindoo female, aged 25, of good caste, very fine complexion, large and prominent jet black eyes, the mother of one child, and marked with the pits of small-pox, has swelling of the glands on both sides of the neck, with ulceration of those on the left side, and copious discharge of white curdy pus. Six months ago, after her recovery from the small-pox, and two months after the birth of her first and only child, the enlargement of the glands commenced. The right swelling went on slowly, and without pain ; the left one increased rapidly to suffocation, and the ulcerated surface now is three inches long and two inches in breadth : the glands under it hard, and much enlarged ;—general health excellent : slight redness of conjunctiva of both eyes, with weakness of sight. Pledgets with ointment of hydriodate of potash to be applied to both sides of the neck, with poultices over them. To take 10 grains of the compound rhubarb pill every night.

May 15th. The entire gland softer and much reduced in size ; the ulcerated one became very painful the day after the application of the ointment, when, the ointment was reduced in strength. Now the discharge is diminished; is not so scrophulous-looking, and the ulcerated surface is clean, and the edges of it are beginning to smooth down: body of gland softer and smaller. Continue remedies, omitting poultices.

22d. The ulcer has gone on healing and the glands diminishing since last report ; swelling of entire gland gone; ulcerated surface looking well, but rather indolent. To be dressed with the ointment—of original strength. The pills every second night.

30th. Ulcerated surface skinned over and much smoother than cicatrices of the like generally are ;—swelling of the gland gone, and the lady is well pleased at the change from loathsome sores to healthy cuticle.

Case 2d. A Nipálese soldier, aged 24, who has been under my care for the last two months for the cure of chronic ulcers on the right leg, is still afflicted with some of the ulcers round the external ancle. He is not, apparently, of a scrophulous habit. I have tried adhesive strap, bandaging, and the lunar caustic treatment, with success in the ulcers on the tibia and calf of the leg, but not in those lowest down. Will try the iodine.

June 4th. Dress the ulcers with the hydriodate of potash ointment, and apply cotton roller up to the ulcer.

June 12th. The ulcers are much improved in appearance : firm granulations are springing up, and the edges all smoothing upwards. Continue.

24th. No retrogradation : healing has gone on regularly, and he is now quite well.

Case 3d. This is an anomalous sort of affection. A Mussulman lad, about 18, had been for many months affected with fetid small ulcers, about the edges and insides of the nostril. I had used various washes and unguents ; under the use of a strong solution of the sulphate of qina and the citrin ointment ; the sores healed several times, but as often returned. I smeared them daily with the hydr : of pot : ointment for a week ; when they perfectly healed, and have not, as yet, (three months) returned.

Case 4th. Our fair countrywomen may take a hint from, and benefit by, the result of this case, despite of Rowland and his incomparable Kalydor. A young and pretty nautch girl was my patient. She had somehow or other (may be in an affray with a rival or a rude lover) got her forehead bruised and scratched : the wounded part had soon healed, but a spot the size of a sixpence remained *quite black*. She was fair to look upon for a native of our burning plains, and vain as fair. The black spot was the temporary plague of her life ;—she had used innumerable recipes, prescribed by natives, but without effect; when, at last, she beseeched of me to remove the deformity. I gave her some of the hyd : of pot : ointment, to be rubbed on the spot, and to my surprise, and her great joy, at the end of a week, there was not a vestige of the discolouration. I have used the ointment three times since in cutaneous discolourations, with the same success.

The next and last case is not quite germain to its predecessor, but its result, if confirmed by further trials, would be of inestimable benefit in India, where horses are so great a comfort, and where they are so subject to disease peculiar to the seasons of the year.

I have an Arab horse (most people have) who, for the last three rainy seasons, has had spots of *bursauttee* on the inside of the thighs and fore-legs: they disappear in November and return in July. This year, as usual, they appeared. About the middle of last month (August) I commenced applying a wash, made of equal parts of the tincture of iodine and water, morning and evening, to the sores, and in twelve days from the first application they were perfectly healed, and now their sites are nearly covered with hair. I have used nitric acid and sulphate of copper washes, but not with half the success of this iodine one. The fact may be useful to some readers whose horses are affected with this troublesome disease.

In the two first cases noted, and in a few others similarly treated since, it was necessary to watch the effect of the ointment on the ulcer. When it gives much pain, and appears to stimulate the ulcer too much, it is necessary to add lard or simple cerate to it. I make the hydriodate of potash ointment with two drachms of the hydriodate, to one ounce of simple cerate as the standard: to be made stronger or weaker as the effect on the ulcer may seem to indicate.

A. Campbell.

Nipál Residency, Sept. 23, 1834.

POST MORTEM CONVERSATION.

Mr. Abernethy—Dr. Gregory—Dr. Mason Good.

Greg. Take care, my dear Sir; the banks are very slippery, and the kelpies of the Styx, are ever on the watch to devour those who stumble on the threshold of Paradise—a little nearer Charon, here is my hand—now jump. Welcome to Elysium!

Aber. Whom have I the honor of addressing?

Greg. My name is Gregory, Gregory of Edinburgh.

Aber. The best Physician and Latinist of his day. Bless my Soul! (but that is done already, if I am really in Elysium) what a rapid trip we have made! Egad! I can hardly believe myself dead; I could scarcely swallow a pill, in the short time the Pluto Steam-Coach, and Fury steamer, have brought me here.

Greg. These are late improvements forced upon the Court of Hades, by the progress of Luxury, and Cholera: the ghosts grumbled so loudly at the jolting of the old diligence, after being used to the Liverpool railway; and Charon was so overwrought during the cholera, that Pluto was obliged to improve the accommodations.

Aber. May I ask, if a great coat, worsted cravat, slouched hat, and oak cudgel are the costume of Elysium? Perhaps influenza prevails; I would recommend blue pill mane nocteque.—See my book, page 116.

Greg. "Physic to the dogs," we don't need it here. You see me in my academic dress, as I lectured to my class; I hate the humbug of caps and gowns. I am on the look out for little Hamilton,* to whom I intend to prescribe, a course of Oak-bark; there is no Court of Session here, "Deo Gratias." But what news from above? we began to think that the Philosopher's Stone had been discovered, so "few, and far between" have been the medical arrivals of late. Is there any change in the two grand divisions of mankind, the Knaves and Fools!

(Enter Dr. Good.)

Aber. Egad! things are pretty much as you left them, I believe. As the great end of life is "to eat, and be eaten," there is a constant regeneration of rich, fat-headed ignorance, provided for the especial sustenance of ingenious roguery. The descendants of those who perished by the Earth-bath, and the Brunonian Theory, seek for premature immortality, through Singing Song's fiery ordeal, or pass to forgetfulness with less eclât, by Dr. Eady's back-door, and "to that bourne whence no traveller returns," through the lofty portals at the "British College of Health."

Greg. What does the "March of Intellect" mean?

Aber. The most expeditious way of making money.

Greg. Has our profession made much progress in so useful an art since my time?

Aber. No profession more so.

Greg. Oblige me; by explaining.

Aber. Some purge the Pharmacopeia of every article, but strong waters, and aphrodisiacs, and find their profit among the numerous class who seek only—

Greg. Appetire Venerem, et ad eam valere.

Aber. Rem acre tetigisti. The Surgeon takes a house with an extensive front in some thorough-fare, and *trepans* patients by strewing the pavement with orange pill and gooseberry skins.

Greg. Ha! ha! All for the good of trade as my friend Sandy Wood said; you know the story?

Aber. No let's hear it.

Greg. Sandy one dark night was plodding homewards, after doing a "canny turn," to some "gude wife," and just in advance of him march'd a smart lad, who whistled as he went along, not for "want of thought," but in deep cunning, for at the end of every bar, he hitch'd a pebble through the nearest window. Sandy at last addressed him with, "I say my lad, why do you break the window?" "It's all for the good of trade, sir; I'm a *Glazier.*" "And *that's* for the good of *my trade,*" said

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* In a quarrel with Dr. Hamilton, professor of midwifery, Dr. Gregory enforced his views by the "Argmentum ad hominem." The little doctor, unable to cope with his Herculean opponent sought the protection of the Court of Session, who awarded him £300 damages. Dr. G. on learning the verdict made a peculiarly characteristic remark!

Sandy, making his gold-headed cane cut down to his pericranium—"*I am a Surgeon.*"

Aber. Ha! ha! ha! Well said Sandy.

Greg. But tell me, surely what you describe, is confined to illiterate quacks—fellows with the cunning, without the courage of the thief.

Aber. It is true, that anti-consumptive *hookahs*, burning to death for consumption, and the art of extracting mercury from the ears of Sir Francis Burdett, and the British Peerage, (*à priori*, one would expect lead) is confined to the men of genius, who are born with an intuitive knowledge of medicine, and who appropriately practice among the hereditary legislators; but, I grieve to say, that medicine, and Surgery are fritter'd down by their legitimate professors, into as many grades as there are classes, tempers, and caprices among men.

Greg. I knew something of this in my time, but the moderns beat us in ingenuity: pray continue your exposé.

Aber. Suppose a young physician has a good person, and pleasing manners: cameos forthwith attract the notice of the ladies to his delicate hands; his symmetrical limbs are cased in "tight pantaloons," and "pumps", and silk-stockings set off his foot: he jobs, or buys on "*tick*," a handsome carriage, and horses; decks his comely visage with "becks, and bows, and wreathed smiles,' and steps immediately into immense practice among the ladies, by virtue of his equipage, and essenced handkerchief. He becomes "a pet, a dear man";—who so skilful as Dr. Bland!

Greg. Any other roads to Fame?

Aber. Oh! yes, they are numerous as her tongues.

Greg. Perge.

Aber. Disappointed, and dyspeptic, and, therefore, religious, young women, and ladies, of an "uncertain age," afford an excellent field of practice. To gain their good graces, the Physician becomes as meek and subdued in mien, as a mendicant friar; asks after their bowels, and their souls, in the same breath, and makes his fortune by marrying some lady, whose religious feelings, and creed, vary with the state of her primæ viæ.

Greg. I am all ear.

Aber. Those again who consider the service of "the men of pleasure, dress, and gallantry," a better speculation; take care to let it be known by precept and example, that they are no admirers of ascetic virtue, that they pity human frailty; and the weaknesses of too plastic natures; the fair more kind, than virtuous: and the victims of the gay world flock to Dr. Freeman as their sympathising friend, and adviser

Greg. A favourite line I should think.

Aber. Yes, but, like all the rest, overstocked. Another set, alone understand the "Diseases of children," and the mystery of making Pap. They are "so fond of children!" The little oyster-eyed homuncle, is declared to be "a little Love," to have "just it's mother's eyes," or the phrase is, "his Father's very image," 'though as like him as the coal-skuttle. There are also the beef-steak and porter, the mutton chop, and ale, the port wine, and fat pork, and the mustard seed Physicians,—cum multis aliis quos nunc prescribere longum est,—all named from their several specifics.

Good. You have omitted the *Bear* school of Medicine, of which you, gentlemen, were distinguished members in your life times.

Aber. Egad! Gregory, "he has us on the hip."

Good. Our profession should be made as little a *Trade* as possible, but while the public attention can be only gained through the senses, the prejudices, and superstitions of men; and so many of our brethren have to toil for daily bread, so long will the mass of ignorance, and knavery exist, which you have enumerated too truly.

Aber. & Greg. We did not flatter mankind.

Good. No, you were too honest, and strong-minded to do so, but you rushed into the opposite extreme, and neglecting the lawful aid, and appliances of conciliating manners and gentle speech, you determined to rule men through their *fears*, well-knowing that the herd may be driven, as well as led, and that an overbearing dictatorial carriage imposes on the ignorant and timid, who conclude there must be good cause for such an assumption of superiority.

Greg. Peccavi.

Aber. Egad! the Quaker has posed us.

Good. Friend John, forego profitless and profane expletives; and do you, doctor, surrender your cudgel, Tantænæ animis celestibus irae?"

Greg. & Aber. We are Quakers henceforth.

Good. I need only mention the names of Mead, Baillie, Hunter, Jenner, Armstrong, to prove that talent, probity, modesty, and generosity, find their meet reward in the love and respect of men, even in the present evil state of things; and when knowledge shall cover the earth, as the waters cover the sea, these qualities will not only be the surest, but the quickest road to private confidence and public reward.

Greg. Veni, Veni, Tempus Veni!

Good. Till then let us think charitably of "poor human nature."—But come, gentlemen, Harvey, the Hunters, and Jenner, dine with me to-day, and we will talk over the past history and future prospects of the Science whose founders were gods, and whose true professors enjoy the best prerogative of superior natures, the god-like power of doing good!

E———

NATIVE MEDICAL EDUCATION.

To the Editors of the India Journal of Medical Science.

Sirs,—I am not one of those who hold the modern doctrine, that when a charge is brought against an individual in the public prints, he is immediately called upon to justify himself through the same medium, and that his failing to do so is to be considered

an irrefragable proof of his being guilty of the whole alledged against him. On the contrary, I deny, both the competency of the Tribunal whose existence is thus assumed, and its authority to pronounce sentence, and hold that no one is bound to plead before it, unless it be perfectly accordant with his inclination and convenience.

Still, I am far from denying that a good deal is due to the public, and that it is wrong in any individual to withhold useful information; especially if it be such as he only, from the nature of his situation, is capable of giving. It is with this view that I am about to make a few observations on the letter published in your number of September last, from Dr. Campbell of Nipaâl, respecting the conduct of one of the Native doctors from the Native Medical Institution, who displayed, as Dr. C. thinks, unaccountable want of confidence in European medical skill.

It is by no means my intention to impugn the general accuracy of Dr. C.'s statement: I am fully aware of the distrust with which Natives view our medical practice, and what an immense load of prejudice must be removed, before they will be induced to apply for it of their own accord; what I propose is, merely to point out a few circumstances connected with this matter, which can hardly be understood without a knowledge of the constitution of the Native Medical Institution, and then notice some of Dr. C.'s general inferences.

The Native doctor, he tells us, is Pursaud Singh, regularly educated at the Calcutta School, and holding its diploma. The only person of this name that I can find in the records of the Institution, is one who entered it on the 1st February 1826, and was appointed to Saugor, March 1st, 1830. This individual, being altogether before my time of superintendence, I can of course say nothing about him from personal knowledge. But I must observe that 1826, was an early period of the Institution. At that time the whole system was a novelty, and there appears to have been a good deal of difficulty in getting respectable persons to enter it. On this account a considerable number were allowed to come in, that to say the least, it would have been fully as well to have kept out. As a proof I may mention, that during my Predecessor's superintendence, no less than from 35 to 40 pupils after remaining in the School for a considerable time, were obliged to be discharged for bad conduct. The system of education too was then very confined. The pupils were taught little more than the bare *names* of drugs, of the bones, of the parts of the eye and brain, of the Chemical gases and the answers to some routine questions about dislocation, no regular system of Anatomy, Physiology or Nosology being attempted. Indeed the general feeling at that time seems to have been quite against any such attempts being made, and in all probability would have prevented their success whatever might have been the talents or diligence of the Superintendant. The fashion, of those days was in fact, the reverse of the present. All liberal knowledge was deemed both superfluous and hurtful, and the scale of a Native doctor's education, it was imagined, could not possibly be made too low, the essence of their education was to be taught nothing. This, however, did not prevent those persons who exclaimed most loudly against any attempts at a higher scale of teaching, from making the most extravagant demands of knowledge from those under their charge, and of exclaiming still more loudly at any deficiency.

I remember the late Secretary to the Medical Board, Dr. Adam, whose abilities and judgment in other matters no one ever doubted, in a conversation which I had with him on the subject, upon my hinting that I thought such pupils should be taught Anatomy, replied in ridicule, "Anatomy, what do they want with anatomy? Put a lancet into their hands, and teach them to bleed." When such very inadequate, I may say, inconsistent ideas of Native medical education were held, even by men of acknowledged talents and information, how incorrect must have been the ideas of the generality, and how little could the institution succeed under such unpopularity.

In such circumstances it is surely not wonderful that a person, not perhaps originally of great intelligence, should be unable to appreciate European Medical Science. If however Dr. C. thinks this an insufficient explanation, I must submit to him the following questions:

First. Without the smallest wish to detract from any individual whatever, does it not sometimes happen that European medical men get into a habit of treating the Natives and their complaints with a degree of hauteur and indifference, not well calculated to inspire kindly or confidential feelings on either side? At least I have seen instances of this.

Secondly. Does it not very frequently happen that Natives find a European surgeon incapable of making much inquiry into their complaints from ignorance of their language, and is it not notorious, that they always place most confidence in those who are able to converse fluently, and understand the details of their symptoms and feelings? Their reasoning on this subject is far from being deficient in solidity. "If a European be either so dull or so careless that he cannot or will not learn our language, how can we believe that he has learnt to understand our constitutions?"

Thirdly. Without any serious comparison between European and Oriental medical science, does it not also sometimes happen, that after a surgeon has in vain exhausted his skill on a case, a Native practitioner as it were through a coup de main, cures it at once by a remedy, coarse indeed and rough, but which the event shows to be efficacious? That such instances do occasionally occur is too notorious to be denied, and is it not natural that they should be promulgated and magnified among a credulous and ignorant people and lead them frequently to prefer their own, to European practice?

If Dr. C. be still unsatisfied, I must then beg him to account for the prevalence of quackery, and the encouragement it obtains in the best informed classes, in the most civilized nations of the globe, in defiance of the demonstrations of sense and experience; Dr. C. must explain the extraordinary confidence placed in Mr. St. John Long, after the fullest experience of the dreadful effects of his pernicious applications. His house, the News papers assured us, had been crowded by carriages of the most distinguished individuals, all combining to patronize a system of torture and murder. How are we to account for the present success of the Homoœpathic doctrine, throughout every country in Europe, a doctrine so utterly contrary to reason, that it seems as if its professors had been resolved to try, how far human credulity could possibly be imposed upon. A doctrine which proposes to cure all diseases by doses the bulk of which can only be expressed by that fractional part of a grain of which the Numerator is unit, and the denominator the 30th power of 100. In order to convey some idea of this magnitude, let us suppose the whole orbit of the planet Herschel round the Sun to be converted into a solid sphere: the proportion of a single grain of sand to this enormous bulk, is greater than one of their doses of laudanum to a single drop. The following are the words of a recent medical periodical on this subject.

"Of all the gross kinds of empiricism this is the greatest, it surpasses animal and metallic magnetism, metallic tractors, celestial beds, the rubbing system of St. John Long, and the puffs of the most notorious and unprincipled quacks that infest this country. Nevertheless, it is patronised as a novelty by the upper classes, and its practitioners, who are only two in this metropolis, are making a golden harvest; and one of them was so much engaged, that he could only take an hour's sleep during a week. So occupied was he in answering letters, and furnishing his medicines by return of post. We shall dwell no longer on this humbug system of quackery, but leave our readers to form their own opinion on the subject." *London Medical and Surgical Journal.*

Nor are we in this intellectual, committee forming, society attending, school establishing city of Calcutta, to pride ourselves on an exemption from these hallucinations. Is it not notorious, that we have within this short time been blessed with the advent of a vegetable universal medicine, which promises to eradicate all diseases whatever; and the most enormous doses of which, at the very moment I am now writing, are magnanimously swallowed with the most unwavering faith by the wisest of our magnates. The following are the words of the professor of this system of Therapeutics.

"I trust, those who have indulged me thus far with a perusal, are prepared to pause here, and to try the medical profession by the all-levelling standard of *practical utility:* and, I wish I could describe this profession, by simply saying, that it is *good for nothing.* In an article, entitled "*present state of medical science,*" and dated 22d December, 1832, I attempted to describe the positive, the over-whelming, and the appalling evils of the profession, so far as it was competent for human language to do this. Since that period, these evils still maintain their sway, with this difference, that the public mind is now much more alive to their atrocious enormity. Yes, the eyes of the community are beginning to open; and the conscience-stricken faculty have not hesitated to stand forth in the eyes of all, as the self-accused murderers of the human family, in the hope of averting the vengeance which is so rapidly accumulating upon them. From their own accredited publications, the "brand of burning shame" is affixed to their foreheads; yet the law of the land still bids them "God speed," and no man has ventured to arrest the fatal knife in its course.

In asserting this total inutility, root and branch, I am at issue with several professed adherents of the Hygeian System, who still think Surgeons do good, for they aver that they are necessary, in their estimation, in cases of accident. I affirm, on the contrary, in opposition to these waverers, that the *Hygeian System of Surgery* is just so much the more efficacious and superior to the present butchering trade, as the general theory and practice is superior in all its departments, to those of the old school. In the words of its founders, "Hygeian Surgery *arises naturally* out of the Hygeian Theory of medicine, and renders all others useless;" and, in accordance with this statement, they have "*engaged before the public,* TO CURE ANY SURGICAL CASE WITHOUT AN OPERATION."

Surely the dogmas of the most ignorant Hukeem must be specimens of perfect rationality compared to such trash as this; yet, as I said before, the Hygeian System of Medicine and Surgery is, even while I am writing, flourishing, patronized and encouraged, in the all knowing city of Calcutta; and in all probability its professor will make a larger fortune than was ever done by any medical man in India. What an instance to afford to the Natives, of the strength and superiority of European intellect!

The truth is, that a belief in quackery is universally diffused throughout human nature, and is confined neither to Native doctors nor to the inhabitants of Hindostan. It is to be found abundantly in all parts of the world both barbarous and civilized; in the College deck'd cities of London, Edinburgh, and Dublin, in spite of all their lectures and professors, as well as in the city of Palaces with all its truth-diffusing periodicals. To expect that Native doctors alone, among the sons of Adam, should be free of it, shews little acquaintance with human nature. Instead of endeavouring to prove that they are so, I shall without hesitation, give Dr. Campbell, an instance, even stronger than his own, of distrust in European medicine, in a Native doctor, who was *not* educated in the Native medical institution, but entirely formed on the old plan; which I believe some surgeons of long standing still affect to praise and patronize.

In 1824, I was Garrison assistant surgeon at Monghyr, and had under me as

assistant vaccinator Kishna Ram Doobey, considered by every one as a man of high respectability and intelligence. He had filled his office successively under Dr. John Browne, late of the Medical Board, the late Dr. J. J. Hogge and two or three other surgeons who had acted in the Garrison temporarily. His time of service therefore could not have been less than 15 years. Monghyr, as is well known, was one of those stations where vaccination was most successfully kept up, Kishna Ram himself was a very good inoculator. It is hardly possible then, to imagine a Native with better opportunities of knowing the efficacy of vaccination; and yet this man, at a time when small pox was epidemic in the town, allowed his own son to die of a natural attack of the disease, rather than either vaccinate him himself, or have him vaccinated by another.

But what is the fair inference to be drawn from all this; not surely that a whole class of Government servants are to be condemned in the lump, because one of them has been found to partake of the weaknesses of his countrymen, or more properly of human Nature; and a class that, considering their origin, their opportunities, and their rank fulfil duties as useful, and as responsible, as any native Government servants whatever; and in whom, in spite of all that has occasionally been urged against them, I shall venture to say, that more confidence is reposed than in any other body of Natives. The true inference is, that Native doctors, as is very natural, share the prejudices of the other inhabitants of Hindostan, just as European surgeons share the prejudices of Europeans, which are neither few nor unimportant. And, that these prejudices are unfortunately so strong that it will be a long time indeed, much longer than either Dr. Campbell or myself can hope to witness, before the generality of the population will be led either to admit the advantages of European practice, or to allow it to be employed upon themselves. To remove these prejudices in our day, is a task, I fear, not only beyond the strength of the Superintendent of the Native medical institution, but beyond that of all our Superintendents of education put together.

——————χαλεπὸν δέ κεν εἰή
Καὶ μάλ' ἐπισταμένῳ, ὅτε μὴ θεὸς
αὐτὸς ἐπελθὼν
Ἀνδρῶν δ' ὃ κ ἄν τις ζωὸς βροτὸς,
ὃ δὲ μάλ' ἠβῶν,
Ῥεῖα μετοχλίσσειεν. ἐπεὶ μέγα σῆμα
τέτυκται.

Nevertheless this will not prevent intelligent Native doctors, *when judiciously superintended*, from being very useful assistants to all descriptions of medical men.

We no doubt flatter ourselves, that the Natives consider our medical practice in a very superior light, and look up to our practitioners as men possessed of wonderful knowledge and powerful medicines. The reverse is the fact, the generality of Natives despise our practitioners as utterly ignorant, because we are acquainted neither with oriental books nor oriental treatment, and they neither want, nor will accept of our advice. This, by the bye, demonstrates the fallacy of those schemes for Native medical education, which go upon the supposition, that pupils well acquainted with the European system, would make their way as general practitioners among their countrymen. The truth would be, that they would never finger a single rupee of fees, and would be reduced to be pensioners on European bounty from the moment their education was finished. All this may be very disagreeable to the complacency with which we, as Europeans, regard every thing belonging to ourselves; and very contrary to the present ideas respecting Native education and native docility, but it is all *true*.

Dr. Campbell tells us that Pursaud Singh had the diploma of the Native medical institution. To what document he refers under this name, I am not aware. The only papers Native doctors receive on leaving the institution, are as follows: First, a copy of the General Orders containing the appointment with the usual pay certificates. Secondly, a certificate signed by the Superintendent, and countersigned by the Secretary of the Medical Board, that the individual in question has been educated at the institution and is consequently entitled to the pay and pension of persons of this description. It has been my practice to write on the back of this, a list of all the tracts, pictures, instruments, &c. the Native doctor has been furnished with, that the Surgeon, under whose care he is, may judge of what he ought, at least, to know and remember. Thirdly, a certificate from the Superintendent, of the pupil's conduct and acquirements while under my care. This is the paper which Dr. Campbell probably calls the diploma, though it be nothing more than a mere certificate of the Superintendent's opinion of the pupil's character. I am of course ignorant of the principles, on which these certificates were furnished by my Predecessor; but, for my own part, I make a point of distinguishing the qualities of each individual in the most careful manner, so that any Surgeon, by requiring the production of this document, may at once see my opinion, at least, of the individual under his authority, and judge whether it coincides with his own. Lastly, the students are furnished with a copy in English and Oordhoo of the questions put to them by the Medical Board at their final examination. An inspection of this document will show that these examinations are as minute and particular as those at Surgeons Hall; and, that to be able to pass them *supposes* a degree of knowledge equal, I may perhaps say, to that of any European surgeon who ever comes out to this country. How far the pupils actually possess this, is a point I shall not undertake to determine, but it is impossible to imagine that they could have been allowed to get through the examination without a considerable portion, and it is certain, that within this some time past, a great advance has been made in their education.

When to this is added, that the individuals now admitted are much more intelligent than formerly, and that none are now taken into the school except those that fully come up to the standard required by Government, it is not unreasonable to hope, that after a moderate time, when the most indifferent of those at present in the service, shall be gradually worn out, they will be succeeded by a new race possessed of much more satisfactory acquirements.

Dr. Campbell states that the Native doctor "looked well-pleased at having had an opportunity of displaying his school learning anent sympathetic buboes, and at having humbugged his new master," the buboes having been by the Native doctor's account "brought on by the laborious exertion required in climbing the hills, for you know, he continued that buboes, are often brought on by severe exercise." It might perhaps be asked whether buboes, if thus brought on, would be really sympathetic in the general acceptation of that term. But this question I shall let pass; and merely observe, that wherever else the Native doctor obtained his knowledge of sympathetic buboes, it certainly was not in the Native medical institution; for, I am pretty sure, that no such doctrines as these were ever described there during his time, nor was there such a word as sympathy or its synonyme Ishtirauk oolhiss ever heard within the walls. This Institution is therefore wholly innocent of this charge.

As a contrast, to the above account, and to show that still, notwithstanding all impediments European science when properly taught does make a little impression on Asiatics, I shall present your readers with the translation of two Persian letters (rather lengthy it must be confessed) which will prove, that in spite of all disadvantages, some of the more intelligent oriental practitioners are capable of appreciating our science and if they don't take our medicines themselves, they are at least abundantly liberal in giving them to others. The letters are from a Persian Hukeem who visited Calcutta, chiefly, as he declared, for the purpose of acquiring knowledge; he resided with us about two years, and left about eighteen months ago. Whilst here, he attended the Native Hospital in the Dhurrumtollah, the Colingah Dispensary in Park Street, the lectures at the Native Medical Institution and drew his information from these sources. In the first letter from Caubul, he appears so far actuated by an interested motive, as to express a hope of being appointed Vaccinator there, but in the second, which he writes from his own country Heeraut, he gives up this idea and appears to be practising entirely on his own account. It may be added, taking all circumstance into consideration, with no small share of judgment and success. It is right to observe, that whatever knowledge this individual acquired, was through the medium of Persian and Oordhoo, as he did not understand a word of English. The letters are written in a plain unostentatious style, and the writer very honestly relates his failure as well as his success.

Salutation to the teacher, of good disposition, of noble descent, the gentle Dr. John Tytler.

After expressing (my) desire of an interview may it be known to your noble mind that by the Divine favour, I arrived prosperously in Caubul, but there was none to fill your room (in my Society). In this place there are produced very many fruits (fit for) presenting (to you); but of what advantage is this, as the distance of the journey is an impediment, and no faithful messenger is at hand?

In the mean time, by your favour, I have administered several remedies very successfully in Bunadir and Caubul. At first the people avoided Europe medicines very much, still some persons took them, and recovered, others did not get well. Fever and ague was very prevalent: to most I give a purge, calomel at night and castor oil in the morning. In many cases the fever was removed by one purge, and to many I gave emetics and sudorifics. I treated to the number of 26 persons; and gave quinine to seven or eight; it was of much advantage and the fever never returned. The people were astonished at the excellence of this medicine, at first no one died, but latterly many persons went off. In fact, seventy or eighty persons died every day. The symptoms of the disease were these. At first rigor, then violent fever, then perspiration: after the perspiration weakness appeared, and many persons were enfeebled. In the beginning there was no diarrhœa or vomiting, but towards the end diarrhœa and vomiting made their appearance; many died and many recovered. On three or four persons my medicines had no effect. In these the ague and fever ceased, but continued fever took place. The rest (of those) to whom I gave medicine got well in the space of three days. Castor oil is now plentiful, (among them) but they have no calomel to take as an alterative at night with castor oil in the morning; and it was surprizing, that as far as I heard, every one who took castor oil, by God's goodness, recovered. At one time the disease Soorkhgaun (measles) took place in Peshawur, and children to the number of 1,200 or more died. At last I went to Peshawur and treated, by your favour, to the number of eleven children. The symptoms of the disease were these: at first an attack of fever, then diarrhœa. I gave the children in the day rhubarb and calomel and compound powder of chalk mixture, and at night, blue pill and opium. On the third day the belly become bound. Although I am giving you a head-ache (troubling you) yet such is what has taken place, and in this country of Afganistan, small pox is also very prevalent and many children go off. I inoculated many children. His highness Nawaub Jubaur Khaun is at present in Caubul, and is intimately acquainted with English gentlemen of lofty dignity; and these gentlemen, whenever they come to Caubul, put up in the Nawaub's house and his goodnesses are very generally known: also my master and commander Sayyud Kuraumut Alee Saheb, who is a news-writer to the Hon'ble Company, resides in the house of his Highness the Na.

waub Jubaur Khaun. As small pox was very prevalent, and, among others, two children of the Nawaub have died of it, so the Nawaub and Sayyud Kuraumut Alee, both addressed a petition to Captain White (?) as a recommendation, and I also wrote a request for a monthly allowance for vaccinating in these districts, to the gentlemen of the Society for Vaccine Inoculation. I sent also a petition to the noble Captain White, that he should forwaid my request to the noble gentlemen (of that Society). If you also in the same way would make an effort in these matters, it would be very well (done); and this disease might be entirely removed from this country, since the noble gentlemen of Europe have always from their desire of benefiting the people of Hindostan and Iran, fixed a monthly salary for inoculationn. What more should I petition? I have given you trouble which you will pardon. Present many salutations to the service of Dr. Wright, (?) also to the service of the Hukeem Saheb, that is Hukeem Abdool Mujeed

(Sealed) Mohammad Hosain.

Oh most excellent of Protectors, deo favente—Let this packet be sent to Calcutta to the house of Dr. Tytler.

The writer is Hukeem Mohammad Hosain of Heeraut, may this travel with the honours of a petition, to the service of the attendants of my protection, the master of my business, the Lord of favour, of lofty dignity, the teacher of good disposition, of prosperous lineage, Dr. Tytler—perpetua sit prosperitas ejus. After abundant prayers and boundless desire, let it be unfolded to your exalted mind that if any one be an enquirer into the state of this dimensionless atom—Deo gloria et laus—On the 25th of the month Shabaun I arrived prosperously and well, safe and sound in the metropolis of Heeraut, which is my customary (native) country. I present thanks to heaven and afterwards thanks to that Lord of favour (whom I am addressing). As the best quality of the sons of the human race among the people of the world, is to understand the merits of their teacher, so I trouble the leisure of that master of affairs (whom I am addressing) and have sent two words by way of exciting remembrance (in) that heart, which is the theatre of liberality, that you may not order me to be reckoned in the crowd of those persons, (who are) forgetful of your perfumed heart; but that I should be gladdened by the marks of the society, and the overflowing of science from that discovery of benefits and origin of science, (whom I am now addressing) may he who is glorious and exalted preserve the liberality possessing existence of that Lord of favour (whom I am addressing). Oh master and asylum of this petitioner I reared the edifice of medical practice and treatment in Peshawur. By the celestial favour and your kindness, I have gone on in my way till now. According to custom I have in every place superintended the health (of the inhabitants). In Peshaswur and Caubul I have performed three or four good cures after the physicians there had abandoned the patients, and had withheld their hands from treatment. In Peshawur one patient had dysentery and his belly was moved thirty or forty times, or more, in the twenty-four hours. I gave him medicine for four days, on the fifth and sixth his belly became bound, part of the upper part of his foot was affected by swelling, I gave him jalap and castor oil twice and he got well. All the people were amazed (saying), the European physicians possess wonderful medicines. As to the other persons whom I treated, Laus Deo! my patient got well in five or six days, from thence in Heeraut, where I now am, I have given medicines to several persons who are at present on my hands. There is a boy who has dropsy, his disease has lasted for four months. It is now fifteen days since I have been giving him medicine. I am giving it in this manner; one day I give him purgative, gamboge eight grains, as many as ten or twelve stools followed, the next day I left him as he was; again on the evening of the third day I gave him two grains of cantharides in one pill, and in the morning, as much antimonial powder or tartar emetic as would produce diaphoresis; again on the fourth day I left him as he was. On the fifth day I again give him a purge. In the week two purgatives, and two sudorifics, and one emetic, and two days left to himself: thus I pursued my course. At present the swelling has left the face and abdomen, but it remains in the feet; and I have once for all stopped his drinking water, and, instead of it, give distilled water of aniseed, mixed with distilled water of taujir (*an unknown drug*) and for food, meat soup at one time with bread, and at another caudle, and sometimes roasted meat, and sometimes preserved apples. I change the food every two days, that the patient's constitution may remain in a proper state; if one kind of food were continually repeated he would certainly be disgusted, hence it is best to change. Further, what was necessary has been submitted. I do not know whether the gentlemen of lofty dignity will order the approbation of this method or not. Further, give salutation to the respected Doctor, the gentle Hukeem Abdool Mujeed, and also forward salutation to the service of the gentle Dr. Wright (?) Although it be unpolite, he (whom I am addressing) will order (its) pardon, may salutation reach the respectable gentlemen Shaikh Wauris Alee, and Meer Nijaubut Alee, and Awusteejee and Maharauj Heera Laul,* and the other students both Hindoo and Mussulmen. My place in (your) lecture room is empty; I have endured much grief; would, I had remained two other years in Calcutta; now there is no remedy. Fruitless grief is to be suffered, and no advantage farther. There is a request to the service of the respectable gentleman, Shaikh Wauris Alee, that if the gentle Hukeem Furrokh Hosain, has honoured Calcutta (with his presence) certainly with my tongue present salutation to his service, and present salutation also to

* These are the assistant teachers in the Native Medical Institution with whom the writer was acquainted when in Calcutta.

Meer Muzhur Hosain, and Mirza Hingun, and to the service of the four or five Mouluvees, the Kautib, the Sircar, and the two Baboos, and all other friends.* For the rest may your days be in pleasure, written the 29th of Ramzaun 1249. The writer, the sinner, the disobedient Hukeem Mohammed Hosain of Heeraut."

I shall conclude with one reflection which I think a perusal of these letters cannot fail to suggest. We see here a native of Persia diligently and labouriously attending a course of European instruction for no other purpose than that of acquiring European knowledge, to be applied to use quite independently of European assistance or patronage. How comes it to pass, that notwithstanding all we have done and are doing in education, it may be doubted whether a single instance of this kind is to be found among the Natives of this country; or whether a single Hindostanee, Hindoo or Mohammadan, has ever been induced to attend a European Seminary of any kind, except either by compulsion, or the prospect of some great and immediate advantage. How is this difference to be accounted for? Is it that the greater intercourse the Natives here have with us, and the knowledge they must possess of our failings and weaknesses, induces them to look upon us with diminished admiration, according to the old proverb that "familiarity breeds contempt?" Or is it that we have rendered our knowledge so cheap, by perpetual and gratuitous offers of it, that it is become "despised in their eyes?" Or is the difference to be ascribed to national character, the greater energy and spirit of enterprize among a people of a colder climate, compared with the enervated inhabitants of the Torrid Zone? This I shall leave to the decision of those who are fond of speculating on the characters of nations.

I am, Sir, Your obdt. servant,

John Tytler,

Supt. of the Native Medical Institution.

Native Medical Institution, Nov. 10, 1834.

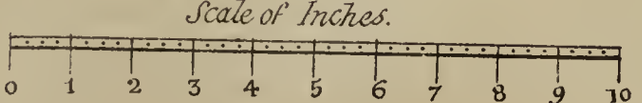
* The establishment of the Native Medical Institution and Government depository.

SELECTIONS.

On the Cerebral Development of Rajah Rammohun Roy.

The following sketches will convey to the reader an accurate general idea of the appearance of the head.

Scale of Inches.



The dimensions of the cast and the cerebral development are as follows:

DIMENSIONS IN INCHES.

Greatest circumference of Head, (measuring horizontally over Individuality, Destructiveness, and Philoprogenitiveness,) ..... $24\frac{1}{4}$

From Occipital Spine to Individuality, over the top of the Head, ... 15

.. Ear to Ear vertically over the top of the head, (measuring from upper margin of the meatus,) ..... $14\frac{3}{8}$

From Philoprogenitiveness to Individuality, in a straight line, ... $8\frac{3}{8}$
.. Concentrativeness to Comparison, .. $7\frac{3}{4}$
From Ear to Philoprogenitiveness ..... $4\frac{3}{4}$
..... Individuality, $5\frac{3}{4}$
..... Benevolence, $6\frac{5}{8}$
..... Veneration, $6\frac{3}{8}$
..... Firmness, $6\frac{1}{2}$
.. Destructiveness to Destructiveness, $6\frac{1}{4}$
.. Secretiveness to Secretiveness, ... $6\frac{1}{4}$
.. Cautiousness to Cautiousness, ... $5\frac{1}{4}$
.. Ideality to Ideality, ... $4\frac{1}{2}$
.. Constructiveness to Constructiveness, $5\frac{3}{8}$
.. Mastoid process to Mastoid process, $5\frac{3}{4}$

Note.—Although the hair was not entirely cut off from the posterior part of the Rajah's head before the cast was taken, it was so short as very little to obscure the form of the head. Except for about an inch backward from the right ear, it does not seem to have been more than a quarter of an inch in thickness. In stating the dimensions of the head, allowance has been made for the hair—the greatest actual circumference of the cast being $24\frac{3}{4}$ inches; the distance from the ocipital spine to Individuality over the top of the head $15\frac{1}{2}$; Philoprogenitiveness to Individuality, $8\frac{5}{8}$; Concentrativeness to Comparison, 8; Ear to Philoprogenitiveness, 5; Ear to Firmness, $6\frac{5}{8}$; Destructiveness to Destructiveness, $6\frac{5}{8}$; and Secretiveness to Secretiveness, $6\frac{5}{8}$; and Cautiousness to Cautiousness, $5\frac{5}{8}$.

DEVELOPMENT.

1.	Amativeness, very large, ...	20
2.	Philoprogenit. rather large, ...	16
3.	Concentrativeness, full, ...	15
4.	Adhesiveness, large, ...	18
5.	Combativeness, large, ...	18
6.	Destructiveness, large, ...	18
7.	Secretiveness, large, ...	18
8.	Acquisitiveness, full, ...	14
9.	Constructiveness, rather full, ...	12
10.	Self-Esteem, very large, ...	20
11.	Love of Approbation, very la.	20
12.	Cautiousness, large, ...	19
13.	Benevolence, large, ...	18
14.	Veneration, full, ...	14
15.	Firmness, very large, ...	20
16.	Conscientiousness, very large, ...	20
17.	Hope, full, ...	14
18.	Wonder, rather full, ...	12
19.	Ideality, rather full, ...	12
20.	Wit, or Mirthfulness, ra. full, ..	13
21.	Imitation, rather large, ...	16
22.	Individuality, rather large, ...	17
23.	Form, full, ...	15
24.	Size, rather large, ...	16
25.	Weight, rather large, ...	16
26.	Colouring, full, ...	14
27.	Locality, rather large, ...	16
28.	Number, moderate, ...	10
29.	Order, rather full, ...	12
30.	Eventuality, full, ...	15
31.	Time, full, ...	15
32.	Tune, moderate, ...	10
33.	Language, rather large, ...	17
34.	Comparison, rather large, ...	17
35.	Causality, rather large, ...	17

"The Rajah was a remarkably stout, well formed man, nearly six feet in height, with a fine handsome and expressive countenance. A cast for a bust was taken a few hours after his death."—(Carpenter, pp. 118—120.)

Application was made, through the Rev. B. T. Stannus of this city, to Dr. Carpenter, with the view of procuring a copy of the cast for the Phrenological Society; and in his absence Mr. Estlin politely got one forwarded to Edinburgh. He mentions, in a letter to Mr. Stannus, that he was present when the cast was taken; that "the body was then quite warm;" and that the phrenologists "may feel satisfied that they have in this cast a most accurate representation of the Rajah's head." Mr. Estlin adds: "He had a great deal of hair; the anterior part of the head was shaved, and the hair on the back part cut off during his illness. The depression on the crown of the head [over Veneration and Hope] is quite natural: a friend told me the Rajah had once placed his hand there, to feel the peculiar formation." In adjusting the body for the purpose of taking the cast, the shoulders happened to be drawn up, so that the thorax, as represented in the bust, wants its proper symmetry.

Notwithstanding what Mr. Estlin says about the accuracy of the cast, we suspect that the artist who made it did not closely join the two halves of the mould, as there is an awkward appearance of scraping in a line passing across the head from immediately before the opening of the ear, to the corresponding point on the opposite cheek, over the organs of Hope and Veneration. This may have rendered the cast from one-fourth to one-half of an inch longer than the Rajah's head. Perhaps, however, our conjecture is erroneous.

The department of the brain which is most largely developed in the posterior superior region, occupied by Firmness, Conscientiousness, Self-esteem, and Love of Approbation. The size of these four organs is indeed very extraordinary. Firmness, as the reader must have remarked in perusing the foregoing details, was prominently displayed throughout the Rajah's whole life. In the words of Dr. Carpenter, "he ever manifested fortitude and unyielding firmness when any great and benevolent object required exertion, and exposed him to calumny and persecution."—(Discourse, p. 40.) His very large Conscientiousness led to that "simplicity, candour, explicitness, and openness of mind," which his intimate friends so much admired, and with which every one who has read his controversial works must have been delighted. Mr. Arnot states, that "he was an ardent lover of liberty, and a fervent well-wisher to the political improvement of mankind."

Without a large Self-Esteem, as well as Firmness, he would not have been fitted to embark in the arduous work of reforming the religion of a people, or to have borne up against the persecution and contumely to which he was exposed. D'Acosta, the editor of a journal at Calcutta, quoted by Dr. Carpenter (page 107), states, that "all his conversation, his actions, and his manners, evinced a powerful sentiment of individual dignity; while, in general, meanness and feebleness of mind are characteristic of the Hindoo." The

force of character and resulting from his large head, as well as the effect of Self-Esteem on his carriage, is here described, and is contrasted with the "meanness and feebleness of mind" characteristic of the small-headed generality of Hindoos. Had the brain of Rammohun Roy been of diminutive size, the circumstance would have done more to extinguish Phrenology than the whole amount of misrepresentation and abuse which it has been doomed to endure.

The influence of Love of Approbation appears in several traits of his character already noticed. His "want of the courage to say 'No,'" indicates in a striking manner the strength of this feeling in combination with Cautiousness; and it even appears that the fear of offending occasionally led him to give an apparent assent to opinions which he was far from holding. There can be little doubt, however, that the rules of eastern politeness, had here a powerful influence on his conduct* and that, had his manners been formed in Britain, Love of Approbation would not have carried him to such an extreme in his anxiety to please. The too great predominance of this faculty was the Rajah's chief failing, and shewed itself in his published works, as well as in private society. "The great defect of his political writings, and indeed of his character," says Mr. Arnot, "was a want of firmness to say that which would be unpleasant to individuals or bodies of men. How far this might have arisen from early habit and education, or from timidity of character, from the effect of living under a despotic government, or from too great a regard to popularity, a wish to please all parties, or from a mixture of these, cannot now be determined." We are inclined to think, that, while all the circumstance here enumerated contributed to the production of this trait, the two last were by far the most influential. A writer in the Asiatic Journal affirms, doubtless with truth, that "he was exceedingly ambitious of literary fame." It is said also that "he thought more of the empty title of Rajah than of the results of the East India Bill;" in allusion to which statement Dr. Carpenter expresses his belief that the Rajah cared for the acknowledgment of his title no farther "than as being connected with the claims which he came to make." With submission, we think that the truth is likely to be found between the two statements. An empty title, as those who are familiar with the varieties of human character must be aware, is not without charms even to a philosopher, if his love of distinction be strong. At the same time, we cannot believe that Rammohun Roy, while his brain was healthy, thought more of his title than of the results of the East India Bill. The statement in the Asiatic Journal, that he took no trouble in reference to the Company's charter, receives from Dr. Carpenter a pointed contradiction. (Pp. 126, 127.) A writer quoted by the journalist, and who is said to have been in close and intimate communication with the Rajah in England, and "whose impartiality cannot be suspected," states that, towards the close of his life, the character of the Rajah underwent a remarkable change. "He had been an enthusiastic advocate of the Grey administration from his arrival in Europe till his departure for France in the autumn of last year. Whether it was that he imbibed some fresh light from Louis Philippe and his subjects, or that the first reformed British Parliament disappointed him, or that he had taken some personal disgust at the present ministry (the most probable of the three), he became most bitterly opposed to it. He was in the habit of inveighing against it in the strongest, I may truly say, coarsest terms; a circumstance the more remarkable, as he had hitherto been distinguished by the courtesy of his language and the studied politeness of his expressions. Even when engaged in the warmest controversies, and in repelling personal insults, he would not formerly permit himself to use a strong epithet, or utter any reflection which could be considered in the least illiberal or ungentlemanly. During the last period of his life his manners were much changed, and the powers of his mind seemed to be decaying. Controversy of any kind, in which he formerly displayed such admirable temper and patience, now seemed to throw his mind off its balance. For reasoning, he substituted invective; and losing the power of persuasion, attributed bad motives to all who differed in opinion from him." "He latterly expressed a wish to withdraw himself from politics entirely, finding the discussions into which they led him no longer supportable with any comfort to himself. In short, his intellectual career had drawn evidently to a close, and though the termination of his natural life may be sincerely regretted by his friends, it is perhaps fortunate for his fame that Providence has decreed he should not outlive his mental faculties."*

In answer to these allegations, Dr. Carpenter says, "We, who saw him in his last weeks can allow nothing of the kind." In a conversation at Stapleton Grove near Bristol, on the 11th of September 1833, at which the Rev. John Foster, and Dr. Jerrard the Principal of Bristol College, as well as Dr. Carpenter himself, were, among others, present, "one and all," we are told, "admired and were delighted by the clearness, the closeness, and the acuteness of his arguments, and the beautiful tone of his mind." In a second conversation, in a party where Mr. Foster was present, "the Rajah continued for three hours, standing the whole time, replying to all the inquiries and observations that were made by a number of gentlemen who surrounded him, on the moral and political state and prospects of India, and on an elucidation, at great length, of certain dogmas of the Indian philosophers. Admiring respect was, I may say, the sentiment of all present." (Carpenter, p. 127.)

On this subject of controversy, we perceive no necessity for differing from either of the parties. The *post-mortem* appearances of the brain indicated disease of considerable duration, occasioned, no doubt, principally by

* In the East "there are modes of conveying a civil negative by an affirmative."—*Asiatic Journal, Nov.* 1833, p. 207.

* Asiatic Journal, November 1833, p. 212.

causes which may be gathered from Dr. Carpenter's work, where they are mentioned with no reference to the point at issue; viz. "the constant and wearing strain which there had been on his powers for the last two years; some causes of harassing vexation which had recently occurred, and which affected him too painfully; and the long course of bitter hostility and arduous exertion which he had passed through before he came to England." (Carpenter, p. 128.) It is reasonable to suppose that his intellect might be obscured by such causes, and that his calmness might have left him during contention with persons whose interests and opinions were adverse to those which he maintained, and whose candour, it may have sometimes happened, was not equal to his own. And it is equally reasonable to believe, that, after a period of mental relaxation and in the society of admiring friends at Bristol, his wonted equanimity and acuteness in conversation might be displayed. We have no doubt whatever that the alteration of the Rajah's character was the effect of disease in his brain. "It is the prolonged departure," says Dr. Combe, "without an adequate external cause, from the state of feelings and modes of thinking usual to the individual when in health, that is the true feature of disorder in the mind."*

Let us now proceed to consider the other features of the character of Rammohun Roy. His head as already intimated, is of extraordinary size; very few, even in Europe, being found of superior volume. This was the source of the force and dignity of character noticed above; it gave vastness to his designs, and inspired with respect the minds of those who knew him. It made him indeed, what he is termed by the Asiatic Journalist, an extraordinary man. "The mere circumstance," says that writer, "of his being able, by his own unassisted energies, to burst asunder the cerements in which the Hindoo intellect had been shrouded for so many centuries, would be sufficient to secure him a name."† But his brain, besides, being of unusual volume, seems to have been active and of good quality. Long-continued observation has led us to consider it as a general rule, that one inherent quality characterizes the various organs composing an individual human body; in other words, that if the bones be dense and firm, and the muscles compact and vivacious, the other organs of the body partake of the excellent quality, and the brain, among the rest, is capable of vigorous action. When the expression of the countenance, is animated and refined, an active and vivacious brain is seldom, if ever, wanting. The person of Rammohun Roy was one which would have induced us to infer activity and refinement of mental manifestation. D'Acosta, describing his appearance in 1818, says, "He is tall and robust; his regular features, and habitually grave countenance assume a most pleasing appearance when he is animated." (Carpenter, p. 107.) The Asiatic Journal has the following remarks: "The person of Rammohun Roy was a very fine one. He was nearly six feet high; his limbs were robust and well-proportioned; though latterly, either through age or increase of bulk, he appeared rather unwieldy and inactive. His face was beautiful; the features large and manly, the forehead lofty and expanded, the eyes dark and animated, the nose finely curved and of due proportion, the lips full, and the general expression of the countenance that of intelligence and benignity." (P. 208.) Mr. Estlin says that he had "a fine, handsome, and expressive countenance." The muscles of the face, shoulders, and breast as represented by the plaster-cast, indicate in some degree an active temperament.

The organs of the propensities generally are large. Without a tolerable endowment of Combativeness, as well as of Self-Esteem and Firmness, he could not have acted with the boldness and decision for which he was so remarkable. Combativeness is quite indispensable to a successful disputant and reformer,—to every one who sets himself to oppose prevailing opinions or customs; and his faculty, added to great general force of character, logical acuteness, exemplary candour and extensive knowledge, rendered Rammohun Roy, what he is termed by the editor of the East India Gazette in allusion to the controversy arising from the Precepts of Jesus, "a most gigantic combatant in the theological field—a combatant who, we are constrained to say, has not yet met with his match here." His propensities, however, seemed to have been generally under due subjection to the higher powers; and by means of his large Secretiveness and Firmness, he was able to suppress improper manifestations. With regard to various points of his character the published accounts are almost wholly silent, and we are therefore unable to judge of the degree in which several of the faculties were displayed. Amativeness is large, and though nothing direct is said about the strength of the feeling, there is little doubt that it was very considerable. His respect for the female sex, as formerly stated, was very marked, and his exertions on behalf of those of his own country, powerful and unremitting. Dr. Carpenter states that the family of Mr. Hare with whom the Rajah lived for two years, bear unhesitating and unequivocal testimony "to the unvarying purity of his conduct, and the refined delicacy of his sentiments." "I had, myself," continues Dr. C., "repeated opportunities of observing with what earnest respect he appreciated true delicacy in the female character: and I learn that, while he always maintained his habitual politeness to the sex, and may therefore have misled the superficial observer, he manifested a very prompt and clear discrimination as to individuals; and that he commonly expressed strong dislike, and even disgust, where they seemed to him to depart from that true modesty which is essential to its excellence." (P. 119.) The Reverend J. Scott Porter, late of London and now of Belfast, a gentleman in whose house the Rajah placed his son for the purpose of education, and whom he

* Observations on Mental Derangement, p. 19

† Asiatic Journal for November 1833, p. 209.

generally visited one a-week, mentions in a Sermon recently published,* that "offences against the laws of morality, which are too often passed over as trivial transgressions in European society, excited the deepest horror in him. His whole manner and appearance discovered how much he shrunk from the very thought of them, when associated with the names of any for whom he had formerly felt respect. The admonitions which he addressed to his son, upon such subjects were among the most impressive that I ever heard.' In England, as we learn from the Asiatic Journal, the Rajah was an especial favourite among the ladies; "his fine person and soft expressive features, the air of deferential respect with which he treated them, and the delicate incense of his compliment, perfumed occasionally with the fragrance of oriental poetry, in which he was well versed, made a strong impression in his favour." The same authority mentions, that he "has left in India a wife, from whom he has been separated (on what account we know not) for some years."—(Pp. 206, 208.)

Philoprogenitiveness is "rather large." The occiput, though not protuberant, is very broad. We have seen no data on which to judge of the actual manifestations of this feeling.—His large Adhesiveness accords with the affectionate disposition which Dr. Carpenter ascribes to him, and the warm attachment which he displayed towards his mother. —Secretiveness, which is large, seems to have been one of the sources (the other being Love of Approbation and Cautiousness) of that "air of uncertainty if not of ambiguity," by which his conduct was occasionally characterized. He was not inclined to make a prominent display of his thoughts. "He repeatedly told me and others," said Dr Carpenter, "that he never introduced his opinions unnecessarily; but that when the subject was introduced, he never hesitated to avow them." (P. 28.) The meagreness of the sketch of his life, which he furnished in consequence of the frequent requests of his friend, Mr Gordon of Calcutta, to whom it is addressed, may be regarded as another illustration of strong Secretiveness.

Acquisitiveness is much inferior to Benevolence and Conscientiousness: it is only "rather full." "In the progress of his efforts to enlighten his countrymen," says Dr Carpenter, "he must have expended large sums of money, for he gratuitously distributed most of the works which he published for the purpose." (P. 103.) Abbé Gregoire, who published an account of him in France, about the year 1818, remarks that "the pecuniary sacrifices he has made, shew a disinterestedness which cannot be too warmly encouraged or admired." In early life he did not scruple to maintain his heterodox opinions, at the expense of being disinherited. Benevolence, it is hardly necessary to remark, was a shining feature in his character through life. It was with him a favourite maxim, and one which he wished to be inscribed on his tomb, that "THE TRUE WAY OF SERVING GOD IS TO DO GOOD TO MAN."

We now came to the consideration of the Rajah's endowment of Veneration and Wonder, the two sentiments which are most influential in forming the religious character. Veneration is the feeling of respect, and does not in any degree determine the object towards which that respect shall be directed. The faculty may be manifested in reverence for Jupiter, or the Lama of Thibet, or graven images, or the God of the Uuiverse,—for crocodiles, or cats, or the Great Mogul, or Catholic priests, or Presbyterian ministers, or rusty coins, or a titled aristocracy, or the ornaments and furniture of a Church. To those who have it disproportionately strong, the word "old" is synonymous with "venerable;" and, in their view, no institution or doctrine, however hurtful and absurd, is, if sanctioned by antiquity, to be at all meddled with. They obstinately adhere to the religious tenets instilled into them in childhood, and will not listen to arguments tending to support doctrines of a different kind. When, on the other hand, the organ of Veneration is moderate, and the intellect is acute and enlightened, the individual unwarped by prejudice and feeling, regards only the intrinsic merits of the doctrines and institutions which prevail around him, and shapes his opinions accordingly. Such a man was Rammohun Roy. His head and history concur in shewing, that intellect, justice, and independence, had with him complete control over the sentiment of Veneration. As soon as he began to think, he intuitively perceived the absurdity of the dogmas taught by the Brahmin priests. He seems never to have venerated except in accordance with Intellect and Conscientiousness. The whole tendency of his mind was opposite to superstition. Wonder, the feeling which, when excessive, leads mankind to gloat upon, and swallow with peculiar avidity, the marvellous, the occult, the supernatural, and the astonishing,—and so tends to produce credulity,—had here but little sway. The mysterious and unintelligible had no charms for him: he submitted every thing to the test of consistency and reason. His great aim was to deliver his countrymen from the degrading idolatry in which they were engulfed, and to establish among them the belief of a Great Supreme. He was no friend of ceremonies in the worship of God. With him, adoration implied only" the elevation of the mind to the conviction of the existence of the Omnipotent Deity, as testified by His wise and wonderful works, and continual contemplation of His power as so displayed; together with a constant sense of the gratitude which we naturally owe Him, for our existence, sensation, and comfort."* He had no tendency to be-

* The Growth of the Gospel, &c.

* These are his own words, in his Second Defence of the Monotheistical System of the Veds. Calcutta, 1817. *Transl.* p. 185.

lieve in miraculous interpositions of the Deity, where his judgment did not perceive sufficient occasion fer them; and it even appears that he did not credit the miraculous origin of Christianity. His views respecting miracles are pretty obvious from a passage in the Second Appeal, (p. 225.) "If all assertions," he says, "were to be indiscriminately admitted as facts, merely because they are testified by numbers, how can we dispute the truth of those miracles which are said to have been performed by persons esteemed holy amongst natives of this country (India)? The very same argument, pursued by the Editor (of the 'Friend of India'), would equally avail the Hindoos. Have they not accounts and records handed down to them, relating to the wonderfull miracles stated to have been performed by their saints, such as Ugustyu, Vushistu, and Gotum; and their gods incarnate, such as Ram, Krishnu, and Nursingh; in presence of their contemporary friends and enemies, the wise and the ignorant, the select and the multitude? Could not the Hindoos quote, in support of their narrated miracles, authorities from the histories of their most inveterate enemies the Jeins, who join the Hindoos entirely in acknowledging the truth and credibility of their miraculous accounts?" "Moosulmans, on the other hand, can produce records written and testified by contemporaries of Mohummed, both friends and enemies, who are represented as eye-witnesses of the miracles ascribed to him; such as his dividing the moon into two parts, and walking in sunshine without casting a shadow. They assert, too, that several of those witnesses suffered the greatest calamities, and some even death, in defence of that religion; some before the attempts of Mohummed at conquest, others after his commencing such attempts, and others after his death." After carefully considering this passage, we find it difficult to avoid the conclusion that Rammohun Roy did not believe in the miracles of Christianity.

He speaks of them, however, in respectful terms—remarking that he "has never placed the miracles related in the New Testament on a footing with the extravagant tales of his countrymen." Dr Carpenter, indeed represents him as acknowledging, in his Second Appeal in defence of the Precepts of Jesus, the divine commission and worderful works of Jesus Christ; and in doing so, quotes (though apparently without laying stress upon them) a few scattered phrases from the Appeal, which seem to countenance the statement: but in perusing, several months before the Rajah's death, the whole of his controversial writings relative to the "Precepts," we were strongly impressed with the idea that he had throughout studiously avoided an explicit declaration of his views regarding the person and miracles of Jesus Christ, in a way which he would not have adopted, had his conviction been that Jesus was a special messenger from God. His admiration of the moral character of the founder of Christianity, however, is every where evident. Near the beginning of the Second Appeal, he says, that "in the veracity, candour, and perfection of Jesus of Nazareth, he has happily been persuaded to place implicit confidence." Our opinion we find corroborated by the gentleman quoted in the Asiatic Journal, who remarks, that the Rajah's published works "state not what he believed, but what he considered the sacred books of different persuasions to inculcate: for example, he maintained that the most ancient Hindoo works taught pure theism; and that the Christian Scriptures, both Old and New Testament, taught the leading doctrines of the Unitarians." It appears, nevertheless, that in the conversation at Bristol, formerly alluded to, he expressed his belief in the divine authority of Christ, in the reality of his miracles, "and particularly in his resurrection, which he said was the foundation of the Christian faith, and the great fact on which he rested his own hopes of a resurrection." Drs Jerrard and Carpenter, and the Reverend Mr. Foster, testify that this profession was explicitly made in their presence. (Carpenter, pp. 82--85.) Mr Arnot, however, gives in the Asiatic Journal for December 1833, a very different account of the Rajah's belief and one which again confirms our own impression. "As I am one of the few in England," he says, in in allusion to Dr Carpenter's statement, "from whom the Rajah never disguised his opinions, I do not deem it proper to incur the reponsibility of asserting that which others, not knowing the truth, would resolutely and conscientiously deny. All I shall say, is, that his piety was, I believe, sincere and his religious principles, I think highly philosophical and benevolent, though not at all corresponding with those of any sect of Christians, except in the doctrine of the unity of God. With every respect to the persons in Bristol mentioned by Dr Carpenter, I do not think any of them were long enough and sufficiently intimate with the Rajah to render their sentiments regarding his opinions of sufficient weight to be poised in the scale against those who have known him for many years." "The profession of faith which seems to have been obtained from the Rajah in his latter days while at Bristol, residing with and surrounded by Unitarians, is a conclusive proof." continues Mr Arnot, "of the state of his mind at that period; such profession being much at variance with the opinions he had always firmly maintained so many years, while his mind was in its full vigour." (P. 290.) If these opposite statements are both to be received as correct—and there seems to be no reason for doubting either of them,—one of two conclusions is inevitable. Either the Rajah departed, in his last days, from opinions which he had for many years steadily professed; or, the unhealthy state of his brain so far withdrew restraint from that "disposition to acquiescence, which eastern politeness requires," and which, as Dr. Carpenter mentions, "was known sometimes to place him in circumstances, and lead him to expressions, which made his sincerity questioned;" that it led him into the avowal of some of the tenets of his Bristol friends, which in reality

he did not hold. Between these alternatives we must leave the reader to judge for himself.

Rammohun Roy entertained a favourable view of man's moral dignity and capability of improvement. In the Introduction to the Translation of the Ishopanishad, published at Calcutta in 1816, he writes: "The physical powers of man are limited, and when viewed comparatively, sink into insignificance while, in the same ratio, his moral faculties rise in our estimation, as embracing a wide sphere of action, and possessing a capability of almost boundless improvement. If the short duration of human life be contrasted with the great age of the universe, and the limited extent of bodily strength with the many objects to which there is a necessity of applying it, we must necessarily be disposed to entertain but a very humble opinion of our own nature; and nothing, perhaps, is so well calculated to restore our self-complacency, as the contemplation of our more extensive moral powers, together with the highly beneficial objects which the appropriate exercise of them may produce."

There is a depression on the Rajah's head over the organ of Hope; and, in the development, we have stated that organ as "rather full." The information on this point of his character is very scanty: so far as it goes it is in harmony with the development. In the English preface to the reprint of the Abridgment of the Vedant, he says that when, in the beginning of his labours to purify the Hindoo religion, he was deserted by his relations, he "felt extremely melancholy." D'Acosta speaks of him in 1818, as having a "habitually grave countenance," and appearing "to have a slight disposition to melancholy." (Carpenter, p. 107).—Wit or Mirthfulness, we may remark, is not large. Another symptom of deficient Hope, is the fact mentioned by Mr. Estlin, that in his last illness, "he told his son and those around him, that he should not recover."

Of the intellectual organs, the largest are Individuality, Language, Comparison, and Causality. His love of knowledge, talent for business, and minute acquaintance with the Scriptures, are illustrations of the strength of Individuality: and we need not say that the great development of Language accords with his extensive literary attainments. In regard to these, Mr Arnot says, "he was acquainted more or less with ten languages; Sanscrit, Arabic, Persian, Hindustani, Bengali, English, Hebrew, Greek, Latin and French. The two first he knew critically, as a scholar; the third, fourth, fifth, and sixth he spoke and wrote fluently; in the eighth, perhaps, his studies or reading did not extend much beyond the originals of the Christian Scriptures; and in the latter two his knowledge was apparently more limited; though, to show his unwearied industry, it may be noticed that he had seriously resumed the study of French in the present year. He has published works in Sanscrit, Arabic, Persian, Bengali, and English; his most useful labour in regard to the first, is his translation of the Veds; and his vernacular tongue, the Bengali, owes to him a well written Grammar, in the English language." He wrote and submitted to the government abroad, many papers for the improvement of its internal administration. "On this subject, by far the most valuable work he has left behind him, is his 'Remarks on the Judicial and Revenue Systems of India,' in the form of queries and replies, contained among the Minutes of Evidence laid before Parliament on the India question. He prepared besides while in England, various able papers or essays on the working of the Supreme Court of Calcutta, against the Salt monopoly in India, &c. which have not been published." He is understood to have made diligent researches into the history of Mahomet, and to have partially written an account of the life of that remarkable man: Mr Arnot affirms, that he looked upon Mahomet, as being the abolisher of the idolatry of the ancient Arabs, as one of the greatest men that ever lived, and an eminent benefactor to mankind. About the year 1819, he engaged, along with the Rev. Mr Adam, and another Baptist Missionary, the Rev. Mr Yates, both well reputed for their oriental and classic acquirements, to translate the New Testament into Bengalee, a task which was found one of extreme difficulty. "We met," he says, "twice every week, and had for our guidance all the translations of the Bible, by different authors, which we could procure. Notwithstanding our exertions, we were obliged to leave the accurate translation of several phrases to future consideration; and for my own part, I felt discontented with the translation adopted of several passages, though I tried frequently, when alone at home, to select more eligible expressions, and applied to native friends for their aid for that purpose. I beg to assure you, that I (though a native of this country) do not recollect having engaged myself once, during my life, in so difficult a task as the translation of the New Testament into Bengalee."* A lesson of great value, which may be derived from this passage, is, that we in Britain ought to recollect that the same, or even greater difficulties, lay in the path of the authors of our own version of the Bible; and that we ought not to be too obstinate in adhering to interpretation, consistent enough, perhaps, with the knowledge and views of our ancestors, but at variance with scientific and philosophical principles discovered and established in later times.

The relevancy and acuteness of the reasonings of Rammohun Roy, resulted from Causality and Comparison, combined with Language and Individuality. The organs

* Correspondence relative to the Prospects of Christianity, and the means of promoting its reception in India. Cambridge, New England, 1824, Lond reprinted. 1825. The beginning of this correspondence was the transmission of a number of questions by the Rev. Dr. Ware, Professor of Divinity in Harvard College, to the Rev. W. Adam and Rammohun Roy, with the view of eliciting information on the subjects specified in the above title.

which give geometrical talent—Form, Size, and Locality—are well developed. Number, however, is only moderate, from which we infer little arithmetical ability. On this point we have no information. Similar remarks may be applied to Order and Tune. It is not likely that he was remarkable for a love of punctilious arrangement and systematic regularity; and as nothing is said about his musical talent, it seems probable that the manifestations of Tune were not such as to attract the attention of his friends.

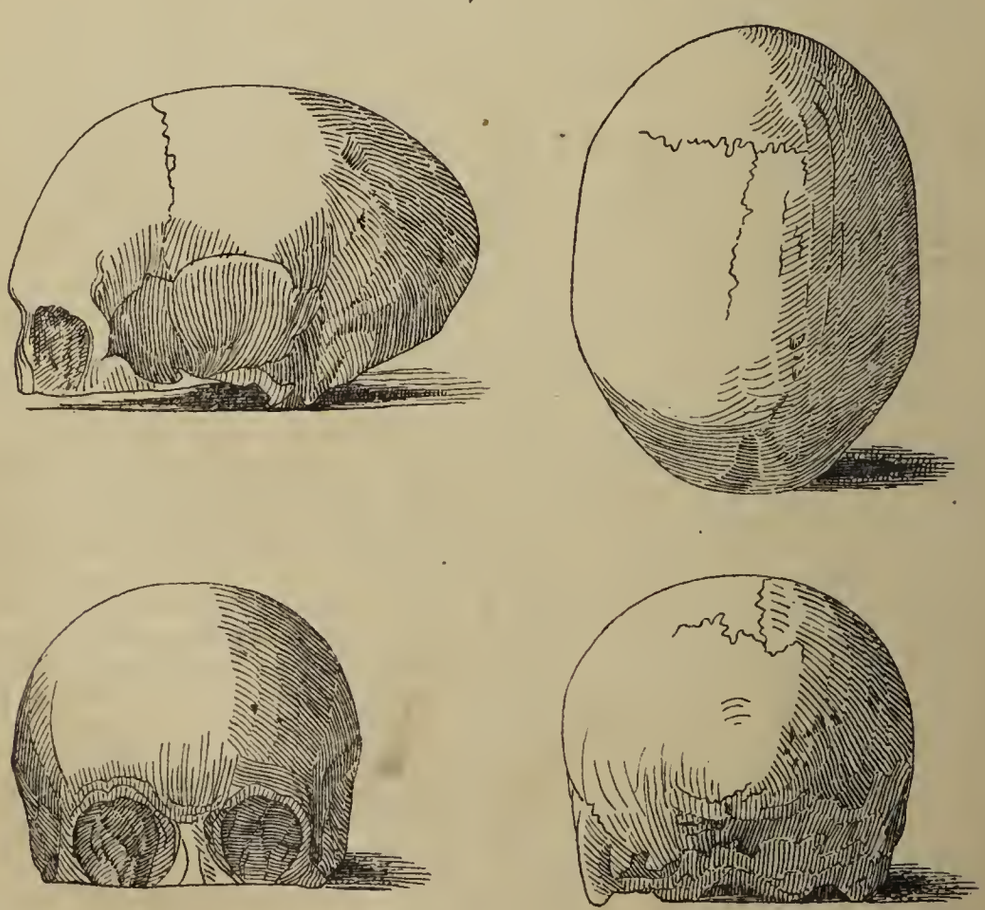
It is now time to conclude our account of this remarkable individual. His character is one which must be highly interesting to every student of the moral, intellectual, and religious nature of man; to the phrenologist it is peculiarly instructive, abounding, as it does, with numerous and varied illustrations of his science. We have entered considerably into detail respecting the religious views of Rammohun Roy, under the belief that such views, when adopted deliberately, conscientiously, and after due inquiry, indicate, to a considerable extent, the natural dispositions of the person by whom they are held. To the intrinsic merits of the opinions themselves, nothing which we have said has the slightest reference.—*Phrenological Journal, June* 1834.

OBSERVATIONS ON THE SKULL OF ROBERT BURNS.

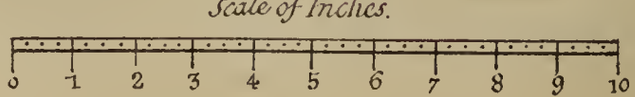
Robert Burns, the Scottish poet, died at Dumfries on the 21st of July 1796, in the 37th year of his age, and, on the 26th of the same month, was interred in St. Michael's Church-Yard. Eighteen years afterwards, a mausoleum was erected to his memory, by subscription, in that cemetery; and, on the 19th of September 1815, his remains were privately exhumed and transferred to the vault attached to it. Mrs. Burns, the poet's widow, having died on 26th March 1834, the vault was opened for the purpose of depositing her remains beside those of her husband; and the gentlemen who took charge of the proceedings, being aware of the anxiety which had long been generally felt to obtain a cast of the poet's skull, resolved to avail themselves of the opportunity to gratify this desire. The consent of the relatives having been obtained, Mr. M'Diarmid, the Editor of the *Dumfries Courier*, went with several other gentlemen to the vault, and successfully effected their purpose.

These gentlemen deserve much credit for the skilful manner in which they accomplished their purpose. Some of the newspapers have raised a silly cry against them as sacrilegious resurrectionists, but the more rational portion of the press has defended them as meritorious labourers in the cause of science and truth. The phrenologists feel greatly indebted to them.

FOUR VIEWS OF THE SKULL OF BURNS.



Scale of Inches.



I. DIMENSIONS OF THE SKULL.

	Inches.
Greatest circumference,.....	22
From Occipital Spine to Individuality, over the top of the head,.....	14
From Ear to Ear vertically over the top of the head,.....	13
From Philoprogenitiveness to Individuality (greatest length).....	8
From Concentrativeness to Comparison,	$7\frac{1}{8}$
From Ear to Philoprogenitiveness,.....	$4\frac{7}{8}$
From Ear to Individuality.....	$4\frac{3}{4}$
From Ear to Benevolence.....	$5\frac{1}{2}$
.....Firmness, ...	$5\frac{1}{2}$
From Destructiveness to Destructiveness, ...	$5\frac{3}{4}$
From Secretiveness to Secretiveness,....	$5\frac{7}{8}$
From Cautiousness to Cautiousness,....	$5\frac{1}{2}$
From Ideality to Ideality,.....	$4\frac{5}{8}$
.....Constructiveness to Constructiveness, ...	$4\frac{1}{2}$
From Mastoid process to Mastoid process,	$4\frac{3}{4}$

II. DEVELOPMENT OF THE ORGANS.

	Scale.
1. Amativeness,rather large,.....	16
2. Philoprogenitiveness, very large	20
3. Concentrativeness, large.....	18
4 Adhesiveness, very large,.....	20
5. Combativeness, very large,.....	20
6. Destructiveness, large,.....	18
7. Secretiveness, large,.....	19
8. Acquisitiveness, rather large,.....	16
9. Constructiveness, full,.....	15
10. Self-Esteem, large.....	18
11. Love of Approbation, very large....	20
12. Cautiousness, large,.....	19
13. Benevolence,very large,.....	20
14. Veneration, large,.....	18
15. Firmness, full,.....	15
16. Conscientiousness, full,.....	15
17. Hope, full,.....	14
18. Wonder, large,.....	18
19. Ideality, large,.....	18
20. Wit, or Mirthfulness, full,.....	15
21. Imitation, large,.....	19
22. Individuality, large,.....	19
23. Form, rather large,.....	16
24. Size, rather large,.....	17
25. Weight, rather large,.....	16
26. Colouring, rather large,.....	16
27. Locality, large,.....	18
28. Number, rather full, ...	12
29. Order, full,..... ...	14
30. Eventualty, large, ...	18
31. Time, rather large,.....	16
32. Tune, full,.....	14
33. Language, uncertain,.....*Ibid.*	
34. Comparison, rather large,.....	17
35. Causality, large,.....	18

The scale of the organs indicates their relative proportions to each other ;—2 is Idiocy—10 Moderate—14 Full —18 Large—and 20 Very Large.

The cast of a skull does not shew the temperament of the individual, but the portraits of Burns indicate the bilious and nervous temperaments, the sources of strength, activity, and susceptibility ; and the descriptions given by his contemporaries, of his beaming and energetic eye, and the rapidity and impetuousity of his manifestations, established the inference that his brain was active and susceptible.

Size in the brain, other conditions being equal, is the measure of mental power. The skull of Burns indicates a large brain. The length is eight, and the greatest breadth nearly six inches. The circumference is $22\frac{1}{4}$ inches. These measurements exceed the average of Scotch living heads, *including the integuments,* for which four-eighths of an inch may be allowed.

The brain of Burns, therefore, possessed the two elements of power and activity.

The portions of the brain which manifest the animal propensities ; are uncommonly large, indicating strong passions, and great energy in action under their influence. The group of organs manifesting the domestic affections, (Amativeness, Philoprogenitiveness, and Adhesiveness,) is large ; Philoprogenitiveness uncommonly so for a male head.

The organs of Combativeness and Destructiveness are large ; bespeaking great heat of temper, impatience, and liability to irritation.

Secretiveness and Cautiousness are both large, and would confer considerable power of restraint, where he felt restraint to be necessary.

Acquisitiveness, Self-Esteem, and Love of Approbation, are also in ample endowment, although the first is less than the other two ; these feelings give the love of property, a high consideration of self, and desire of the esteem of others. The first quality will not be so readily conceded to Burns as the second and third, which, indeed, were much stronger ; but the phrenologist records what is presented by nature, in full confidence that the manifestations, when the character is correctly understood, will be found to correspond with the development, and he states that the brain indicates considerable love of property.

The organs of the moral sentiments are also largely developed. Ideality, Wonder, Imitation, and Benevolence, are the largest. Veneration also is large. Conscientiousness, Firmness. and Hope, are full.

The Knowing organs, or those of perceptive intellect, are large ; and the organs of Reflection are also considerable, but less than the former. Causality is larger than Comparison, and Wit is less than either.

The Skull indicates the combination of strong animal passions with equally powerful moral emotions. If the natural morality had been less, the endowment of the propensities is sufficient to have constituted a character of the most desperate description. The combination as it exists, bespeaks a mind extremely subject to contending emotions,—capable of great good, or great evil,—and encompassed with vast difficulties in preserving a steady, even, onward course of practical morality.

In the combination of very large Philoprogenitiveness and Adhesiveness, with very large Benevolence and large Ideality, we find the elements of that exquisite tenderness and

refinement, which Burns so frequently manifested, even when at the worst stage of his career. In the combination of great Combativeness, Destructiveness, and Self-Esteem, we find the fundamental qualities which inspired "Scots wha hae wi' Wallace bled," and similar productions.

The combination of large Secretiveness, Imitation, and the perceptive organs, gives the elements of his dramatic talent and humour. The skull indicates a decided talent for humour, but less for wit. The public are apt to confound the talents for wit and humour. The metaphysicians, however, have distinguished them, and in the phrenological works their different elements are pointed out. Burns possessed the talent for satire; Destructiveness, added to the combination which gives humour, produces it.

An unskilful observer looking at the forehead, might suppose it to be moderate in size; but when the dimensions of the anterior lobe, in both length and breadth, are attended to, the intellectual organs will be recognised to have been large. The anterior lobe projects so much, that it gives an appearance of narrowness to the forehead, which is not real. This is the cause, also, why Benevolence appears to lie farther back than usual. An anterior lobe of this magnitude, indicates great intellectual power. The combination of large perceptive and reflecting organs, (Causality predominant), with large Concentrativeness, and large organs of the feelings, gives that sagacity and vigorous common sense, for which Burns was distinguished.

The skull rises high above Causality, and spreads wide in the region of Ideality; the strength of his moral feelings lay in that region.

The combination of large organs of the animal propensities, with large Cautiousness, and only full Hope, together with the unfavourable circumstances in which he was placed, account for the melancholy and internal unhappiness with which Burns was so frequently afflicted. This melancholy was rendered still deeper by bad health.

The combination of Acquisitiveness, Cautiousness, Self-Esteem, Love of Approbation, and Conscientiousness, is the source of his keen feelings in regard to pecuniary independence. The great power of his animal propensities would give him strong temptations to waste; but the combination just mentioned would impose a powerful restraint. The head indicates the elements of an economical character, and it is known that he died free from debt, notwithstanding the smallness of his salary.

No phrenologist can look upon this head, and consider the circumstances in which Burns was placed, without vivid feelings of regret. Burns must have walked the earth with a consciousness of great superiority over his associates in the station in which he was placed; of powers calculated for a far higher sphere than that which he was able to reach, and of passions which he could with difficulty restrain, but which it was fatal to indulge. If he had been placed from infancy in the higher ranks of life, liberally educated, and employed in pursuits corresponding to his powers, the inferior portion of his nature would have lost part of its energy, while his better qualities would probably have assumed a decided and permanent superiority.

In our next Number, we shall examine more fully the character and cerebral development of Burns.—*Phrenological Journal, June* 1834.

MOST IMPORTANT INQUEST AT YORK.

Verdict—"Manslaughter," by Morison's Pills.

Considerable excitement has prevailed in this city since Friday last, in consequence of the death of Mr. Richard Richardson, aged about twenty years, an apprentice to Mr. Thomas Sowray, draper, Pavement, who had been ill of the small-pox, and who, it was very strongly reported, had had his death considerably accelerated by taking Morison's Pills. To such a length were various rumours carried, that, on Saturday afternoon, it was determined to have an inquest held over the remains of the unfortunate young man; and Mr. John Wood, one of the coroners for this city, immediately issued his precept for summoning a jury.

Samuel Robson.—I am an apprentice to Mr. Sowray: deceased was also an apprentice there. He began to be ill on Monday the 16th of June. He told me on that day that he was ill; and, at his request, I felt at his breast, which was all full of rash. He also told Mr. Sowray that he was ill, who felt his breast at the same time that I did. I do not think that he took any medicine that night. On the following morning the rash had all gone in again. He took some pills that morning, of Mr. Sowray's with whom he slept. I fetched a 5*s*. 6*d*. packet of pills on that day from Mr. Webb's, and Mr. Webb also came to see him. I can't say whether he was sent for or not. I also fetched some ginger beer from Mr. Webb's but never fetched any more pills. They were Morison's Pills. On the following Friday the rash again broke out. When Mr. Sowray came down stairs on that morning (Friday), he said, that "the disease had broken out again, and that it was the small-pox." Mr. Webb had attended him during the week. After the spots had come out again on the Friday, Webb attended him every day, and sometimes two or three times a-day, I fetched Webb occasionally by Mr. Sowray's orders. Deceased told me he continued taking the pills; and, once, I saw him take some powder. He took it with ginger beer, or water and sugar, I can't say which. I believe he got the powder from Mr. Webb, and Mr. Sowray mixed it for him. When Mr. Sowray came into the shop after visiting the deceased, he always told us he was getting better; I thought from his appearance he was getting worse. When the eruption first came out, I did not see any on his face. When the pox came out again, there were a few on his face: they were very full on his breast,—clustered together; they appeared to die away

in the afternoon. The pill he took on the Tuesday purged him very violently, as also did those he took afterwards. He was also very sick, and complained of great pain at his stomach. He never appeared to be delirious, but talked very little. He did not express any desire for a regular medical man, neither did I hear Mr. Sowray propose it to him. When he was first taken ill he did not complain to me of shivering or chilness. On the Friday, when the spots came out and died away, Mr. Webb said they would all die away in the same manner. Deceased continued to be very ill until Friday the 27th of June. He was not attended by any medical man, except Mr. Webb, until that morning, when Mr. James Allen, surgeon, came to see him, a little after eleven o'clock. Mr. Webb had visited the deceased that morning before Mr. Allen came. I fetched the deceased's mother the night before. When she arrived, Mr. Webb said he was better, and was coming round very nicely. Deceased appeared to be well up to Monday the 16th of June, and attended regularly in the shop until that day. He was never down stairs from that time except once, when he went as far as Mr. Triffett's, which is the next door but one to our shop.

Mary Brittain, Mr. Geo. Robson, and Mr. Jacob Hugill corroborated the evidence of the first witness.

Mr. Joseph Spence, druggist, being a member of the Society of Friends, affirmed, I have examined the pills called Morison's pills, No. 1. In my opinion, they are composed of Cape aloe, gamboge, sulphate of potass, and gum guaiacum. I cannot state the proportions. I have examined the vegetable powder, but it is some time ago, and to the best of my recollection, it appeared to be composed of sugar, cream of tartar, and cinnamon. The pills now produced, No. 1 appear to be the same as those I have examined, and I should suppose are composed of the same ingredients. I have examined the pills, No. 2, and believe them to consist of about equal proportions of gamboge and aloes. Three pills of No. 1 weigh nearly seven grains; and three of No. 2 weigh nine grains.

Mrs. Elizabeth Whipp, mother of the deceased.—I was sent for by Mr. Sowray, and came on Thursday last; I found my son worse than I had anticipated, and mentioned my fears; Mr. Sowray told me, that Mr. Webb was attending him, and that he was doing very nicely. Mr. Webb also told me that he was getting better. Mr. Webb stayed with him until about twelve o'clock on that night, and I sat up with him all the night. Mr. Webb came again early in the morning. On Friday morning he took some roll and butter and coffee, of which he ate very greedily. Mr. Webb said that I had not taken proper care of him, and that the fever was very high. He also said that he would soon be better, as he had cured many cases of small-pox.

Mr. James Allen, surgeon.—I was called in to attend the deceased on Friday morning last, I attended him between eleven and twelve o'clock. Mr. Webb informed me that he had attended the deceased at his (deceased's) own request, and that it was a case of very severe small-pox. I then went into the room, and found him labouring under small-pox of a very bad sort. His eyes were very much sunk, his hands cold and livid, and the body covered with cold and clammy perspiration. I could not distinguish any pulse: the pox presented the appearance of perfect maturation. I told Mrs. Whipp I considered her son in very great danger. Mr. Webb remarked, that the fever was very high: and I said, "if you can discover any pulse it is more than I can do." I directed some warm wine and water to be immediately given to him, by which deceased expressed himself very much relieved. I then gave him some cordial medicine, and saw him again about an hour and a half afterwards, when he was quite insensible and rapidly sinking, and died, I believe, within half an hour afterwards. When I first saw him I expressed my opinion that it was not possible to recover him. I examined the body on the following day (Saturday) in company with Dr. Wake, Dr. Belcombe, and Mr. Matterson. We found the stomach and bowels indicating considerable inflammatory action, the upper portion of the stomach approaching almost to mortification. This, in conjunction with the other morbid action, was quite sufficient to destroy life. The inflammation we found occasionally accompanies the small-pox, and other private diseases. My opinion is decidedly that such treatment, as has been described by witnesses, was not only injudicious, but most calculated to render a mild and manageable case a highly dangerous one, by depressing the powers of life so frequently and constantly. Supposing the disease to have commenced on the Friday, when the eruption came out (and which I think is the day on which the disease ought to be taken to have commenced), then the patient dying on the following Friday was a period earlier than usual for patients to die of the small-pox. I am decidedly of opinion that the treatment he received was such as was calculated to accelerate his death.

Baldwine Wake, Esq. M. D.—I was present at the examination of the body on Saturday night, and found it covered with an eruption of the confluent small-pox. I observed the same appearances as those described by Mr. Allen; and having made similar examinations after death by small-pox, I observed, in the present instance, a greater degree of inflammatory action to have existed in the stomach and small intestines than I had ever witnessed before, which I conceive might have arisen from some severe irritant having been taken; and finding that the deceased had taken very large doses of Morison's pills, which do contain gamboge, I have no hesitation in saying that the appearances of the stomach were owing in a great measure to the highly improper exhibition of so violent a drastic purgative, which, by inducing extreme debility, must have converted a disease of a mild character into one of the malignant form which the body presented. It is my opinion that the

number of pills described by the witnesses to have been taken by the deceased, in the short period of his illness, was sufficient to cause his death, independent of the disease under which he laboured.

William Matterson, Esq., surgeon, gave similar testimony; and added, that he had been twenty years in practice, and had never known a case of small-pox become fatal when the patient had been vaccinated, and where proper treatment and attention had been given.

Henry Stephens Belcombe, Esq., M.D., also spoke in the same terms as the other medical gentlemen as to the appearance of the body after death, but would not go so far as to say that the quantity of pills which the deceased had taken would have the effect of producing the inflammation of the stomach. Gamboge, when taken in over doses, is a very deleterious medicine.

It being now ten o'clock and there appearing no probability of the inquiry being concluded, the corner adjourned the inquest until Tuesday evening, at seven o'clock.

Dr. Wake, on being further examined, deposed, that if the strongest man in York was to take thirty grains of gamboge per day, which he knew Morison's pills to contain, it would make him extremely ill, without his having any other disease. Each pill, as far as could be ascertained, contained about one grain of gamboge and one of aloes, so that taking thirty pills per day would be thirty grains of each drug. The proportion of the other ingredients in the pills was too small in quantity to neutralise the deleterious effects of the gamboge and aloes.

Mrs. Sarah Shepherd, of Gillygate, deposed to having heard Mrs. Whipp say she paid Mr. Webb 15s. for the pills.

The Coroner then read over all the evidence, and told Mr. Webb that if he had any statement to make, he was ready to hear him, cautioning him, at the same time, that as it was impossible to anticipate what the verdict of the jury might be, though he would not be on his oath, neither would he or the jury ask him any questions, yet he must take down what he said, and it might be produced against him in evidence, if future proceedings should be the result of the present inquiry.

Mr. Joseph Webb then stated that he wished to correct a statement which was contained in a letter to Mr Robson, with respect to the time mentioned in it, which must be wrong, though it was written by himself. The letter states, that at six o'clock in the morning he thought he was better; which ought to have been, that, when he went at six o'clock in the morning, he found him altered for the worse. The letter was written under great excitement, and might contain expressions which he did not intend to convey. Mr. Webb then went into a minute detail of every circumstance that had occurred from the time of his being called up by his brother-in-law, Mr. Sowray, on Tuesday morning, the day following that on which the deceased was taken ill, to the time of his death. His statement occupied about three hours, and was patiently and attentively listened to by the jury; but as we have given the circumstances so fully, we do not consider it necessary to go through the whole of what he said. It was one o'clock in the morning before he had finished, at which time another adjournment took place.

The further Adjourned Proceedings.

At six o'clock on Wednesday evening, the jury again assembled.

Thomas Smith and John Render were brought forward by Mr. Webb; the former to prove that the deceased had told him he had the greatest confidence in Morison's Pills and that he would take them in preference to any other medicine; and the other, that he had been cured of the small-pox by taking the pills. Mrs. Ann Rumfitt also deposed to the good effect she had received from taking the pills, both for the small-pox and other complaints.

The coroner then summed up: he said it was his duty now to address them in this important case, important not only to the public, but to the individuals concerned. He trusted they would dismiss from their minds every report or assertion they might have heard out of doors, and be guided solely by the evidence which had been brought before them in their decision. The evidence had been heard at great length, and much time had been consumed in the inquiry, and all parties concerned had had an equal chance. They had listened to the evidence with great patience. It had been read over to them twice; but nevertheless, if they required it, he was ready to go over it again. He should abstain as far as possible from making any remark on the evidence, and confine himself to propounding the law as applicable to the case. There had been no evidence, neither had it been in any way suggested that there was a desire to impute any disposition to do injury to the deceased; consequently no question could arise as to that. That Mr. Webb had administered the pills to the deceased for the purpose of curing him, there could be no doubt; the question more immediately to be decided was whether Mr. Webb had acted legally in administering medicine at all. The first question was, whether the deceased came to his death from taking Webb's medicine, which it was most important to decide, as on this must rest the foundation for their verdict; for if they were satisfied that the medicine had accelerated death, or caused the patient to die sooner than he otherwise would have done, which of course would be accelerating death, they must find their verdict accordingly; but if they were satisfied that he died from the effects of the disease, then they must say that he died by the visitation of God. The Coroner next drew the attention of the jury to the law of the case, and quoted opinions on both sides of the question. The most important, however, and the one on which the most particular stress was laid, was that of Mr. Justice Bailey, in a case tried at Lancaster assizes in 1827. The prisoner was an old woman who had administered an emetic to a sailor, who

had been discharged from the hospital at Liverpool, for the purpose of getting the mercury out of his bones, and the ingredients being of a deleterious nature, the man died from the effects of taking the powder, which was intended to cure him. The opinion of Mr. *Justice* Bailey was thus expressed :—"I take it to be quite clear, that if a person, not of medical education, in a case where professional aid might be obtained, undertakes to administer medicine which may have a dangerous effect, and thereby occasions death, such person is guilty of manslaughter. He may have no guilty intention, or may have a good one; but he has no right to hazard the consequences in a case where medical assistance may be obtained. If he does so, it is at his peril." This the Coroner thought the highest authority that could be brought to bear upon the case; and after again entreating them to dismiss from their minds all considerations but what were to be derived from the evidence, he left them to consider for themselves.

The Jury then retired; and, after an absence of an hour and a half, returned to have the evidence of the medical men again read, when they remained locked up for some time longer; after which they again came before the Coroner, and said that they were all agreed on their verdict except one. The Coroner said, if twelve of them were agreed he could take their verdict, but would prefer having it unanimous; and after hearing the evidence of Dr. Belcombe, they once more retired; but the refractory member declaring he would not give way, at very near 11 o'clock they came before the Coroner, and returned a verdict of "*Manslaughter*" against Joseph Webb, at the same time stating it as their opinion that Mr. Webb administered the pills not knowing that they contained any deleterious drug.

Mr. Webb immediately afterwards entered the room, attended by Mr. Leeman as his legal adviser, the latter of whom stated that Mr. Webb had come for the purpose of surrendering himself.

A commitment was accordingly made out and delivered to the constable; the Coroner also expressing a wish that, in consequence of the handsome manner in which Mr. Webb had surrendered, he should have every kindness shown to him by the constable.

Mr. Webb remained at his own house all night, and on Thursday morning was taken to the city jail.—*London Med. & Surg. Journal, July* 1834.

CRYING OF THE FŒTUS IN UTERO.

To the Editor of the Lancet.

Sir,—I beg to solicit the publication of the following case, which I presume you will deem of sufficient importance to occupy a place in your valuable periodical.

I was some time since called to the wife of a blacksmith at Preston, about two miles from my residence, who was in labour with her tenth child. I had attended her in several former confinements, and she had always had quick deliveries, as the pelvis was unusually capacious, and her pains were active. After I had been a few minutes in the room, I proposed and made an examination, and found the face presenting, and making its descent into the pelvis, the chin resting on the os pubis.

A few strong pains succeeded, and I again examined to ascertain if the face had made any advance. I found it had done so, and that it was pressing on the perineum; but in making this examination, my finger passed freely into the mouth of the child, and it immediately gave a convulsive sob, and cried aloud to the great terror of the mother and of the bystanders, when they found that it was still in the womb. I had great difficulty in calming the agitation produced by this event upon the woman, whose pains were suspended for nearly an hour, but I eventually succeeded by explaining that the face was presenting and that from the circumstance of my having passed my finger into the mouth, the air had gained admission and enabled the child to breathe; this, with a little spirit and water, and a dose of the ergot of rye, succeeded in bringing on the uterine action, and, after two pains, the child was expelled alive and well, at least an hour after it had respired and cried in the womb. I am not aware that any instance similar to the above is on record, but I consider it one of consequence as a physiological and medico-legal point, and one which will throw additional difficulties in the way of that clear proof which is so desirable in cases of infanticide. I remain, Sir,

Your faithful and obedient servant,

William Tomkins, Surg.

Yeovil, July 8th, 1834.

ST. THOMAS'S HOSPITAL.

Efficacy of Iodine on Secondary Syphilis.

This affection, which, up to the present day, has excited so much medical speculation, and in the cure of which so many different opinions have been advanced, appears at last, by numerous experiments that have been made in the above hospital, and of which the following cases will be a proof, capable, at least in some of its stages, of being perfectly eradicated. The forms of the disease have been so frequently alluded to by men of the first talent, its progress so accurately examined, and its effects so frequently observed, that it will be useless for us here to enter into a lengthy description. The period, however, at which secondary syphilis makes its appearance after the primary symptoms, has been, especially by the army surgeons of this country, limited to a certain period, the fallacy of which must have been observed by every practical surgeon or physician. Facts are every day to be witnessed in these hospitals, in which periods of a greater or less extent have elapsed since the incubation of this virus into the circulating system—weeks, months, and even years—as will be seen by the following observations.

The parts affected by this poison, after the virulence of its first absorption, are so gene-

rally the same, and so frequently observed, that the subjoined cases will be sufficient to illustrate the different surfaces attacked. Whether or not it is owing to the modification of the virus, by the changes it is liable to undergo from the alteration of the system by treatment, or from the peculiar idiosincracy of the constitution attacked, upon its ultimate characters, at present remains in great obscurity. However, it is a well-known fact, that if the disease be left to a spontaneous cure in its primary stage, its secondary effects are much more virulent, and the cure of the former much protracted; at once showing the importance of subduing, as early as possible, the effects of the virus.

We will here enter into a short description of the secondary or constitutional symptoms, to which the proper local signs of syphilis are sure to lead, if not checked in their progress; as the cases will merely illustrate the state of disease at the time under treatment. The symptoms are (but of course liable to vary) soreness and ulceration of the tonsils, and neighbouring parts of the pharynx; the ulcers are of a distinctive character, foul, and rugged, excavated in the centre with a whitish-brown slough, and surrounded by an elevated, red, erythematous outline. The conjunctiva of the eye is generally the next to suffer, becomes inflamed, and ulcerations may be observed on the eyelids and angles of the eye. An eruption appears on the skin, which desquamates in scurf, afterwards in scales, and at a still more advanced period in scabs leaving a foul ulcer, which by degrees becomes more excavated, and discharges a fluid of an offensive nature.

At a more advanced period, irregular pains shoot about the limbs, which from heat, become aggravated. The periosteum and bones at length become affected, nodes supervene, which are followed by caries of the bone; it thus continues to spread, till it destroys the patient.

It is more particularly this latter stage of the disease that has baffled all attempts of treatment to overcome it, and to the ravages of which so many human beings have fallen victims.

Case I.—Ellen de Ling, aged 30, was admitted into Anne's ward of this hospital, with severe pains in her legs, from which she had suffered for three months; so severe were they when admitted, that she could scarcely walk; her constitution, which had been generally good, was much impaired; countenance sallow; complained of great debility, and was emaciated. Dr. Williams, under whose care she was admitted, prescribed eight grains of the hydriodate of potass out of camphor mixture, to be given three times a-day. After taking this medicine for three days, the pains became much alleviated; the periosteum, which covered the inner surfaces of the tibiæ, and were rugged, became less painful and smoother; in the course of a fortnight all the symptoms had disappeared, her countenance became more blooming, and from her own statement, which also was evident to all who visited her, she got fat while under the influence of the medicine; and on the 19th of June, three weeks from the time of her admission, she was discharged perfectly cured.

Case II.—Jane Parish, mantua-maker, aged 22, of scrofulous diathesis, came in the same ward, under Dr. Williams, with ulceration of the pharynx and rupia, the scabs on the nose and several parts of the body had formed into deep ulcers, the most severe situated especially on the right arm, the size of which were as large as a crown piece. She also suffered from severe pains in her limbs, which deprived her from all rest; countenance pallid; bowels regular. States that three months previously she had the venereal disease, for which her mouth was made very sore, and the chancres readily healed. Great debility of constitution when admitted. Dr. Williams prescribed in this case, as the disease appeared particularly to attack the mucous, and cutaneous surfaces, decoction of sarsaparilla with wine and sago; and ordered the ung. hydr. nit. to be applied to the ulcers. She has now been in the hospital under this treatment about three weeks, all the sores have kindly healed, her general health has become much improved. All pains have left her, and she is now in nearly a fit state to be discharged from the hospital.

Case III.—Louisa Wilmott, a married woman, aged 34, who states that six years ago, when first married, her husband gave her the disease, which, after submitting to a mercurial course, subsided; and not until five months ago she experienced any secondary symptoms. About that period she received a blow from her husband on the nose, pain supervened, fistula lachrymalis ensued, for which she was then admitted into the hospital under Mr. Green, who relieved her by performing the operation. After this her nose continued to trouble her; felt heat and pain about the internal parts of it; and at different times small pieces of bone were discharged from the nostrils. She also suffered from severe pains in her limbs, increased when in bed; these were soon succeeded by hard lumps or nodes forming on the inner surfaces of the tibiæ, which became so tender that the least pressure caused excessive pain. On the 29th of May she came into Ann's Ward, under Dr. Williams's observation; the symptoms then continued as above, and Dr. W. prescribed the hydriodate of potass in camphor mixture. This she has continued to take up to the present time; in the course of a week after its use the pains subsided, and the osseous deposition has been gradually disappearing. Since she has been taking the medicine her nose has felt much easier, and no bone has within this time been discharged.

Case IV.—George Leighton, a butcher, aged 34, of sanguineous temperament, and good constitution. States that he has twice been the subject of venereal chancres; the first that he suffered from was about six years ago, the ulcers healed after taking a few doses of mercury, without the least salivation being produced; no secondary symptoms supervened, and at the expiration of two years, he again contracted the same affection. At this

time, before the healing of the sores, he was profusely salivated, which appeared to destroy the venereal virus, and, as he thought to have entirely eradicated it from his system; for not until six months ago, four years from the last attack, he experienced any thing like secondary syphilis; at this time a copper coloured eruption made its appearance, and pains of the limbs supervened. His medical attendant again prescribed mercury for him, which controlled, to a certain extent the eruption, but the pains of his limbs increased, became so excessive, that he could get no rest. On the 19th of June he came into Edward's Ward under Dr. Williams; at this time the pain continued severe; there were lumps on the periosteum covering the tibiæ, which from the least pressure by the finger caused excruciating agony. Eight grains of the hydriodate of potass were prescribed; in the course of five days the pains had nearly disappeared, the thickening of the periosteum gradually subsided. He is now perfectly well, with the exception of a slight eruption in various parts of the body, this has not at present been inclined to subside under the influence of the iodine. He states positively, that he has not had the venereal disease for the last four years, moreover, that he has been married for the last three.

Case V.—Edward Burke, an Irish labourer, aged 36, who states, that twice in his life he has been unfortunate enough to have contracted this disease; the first time was about eight years ago, and the latter about a twelvemonth since; at both periods he was profusely salivated, and always obliged to continue his work during the continuance of the mercury. Has several times suffered from pains in his limbs, but never so severely as two weeks previous to his admission. He came under Dr. Williams, into Edward's Ward, on the 19th of June; there was then great thickening of the tibial periosteum, and pains so excessive that he could scarcely move about; in which state he had been for a fortnight. The hydriodate of potass, in the same proportion as in the other cases, was prescribed; the pains soon ceased, and the nodes are fast disappearing.

Case VI.—Joseph Lawrence, of short stature, and scrofulous diathesis, a tailor, 18 years of age, who was first affected by the disease a twelvemonth since, came into the hospital last November, with ulceration of the bones of the nose, throat, and pharynx, and with such excessive pains in the limbs, that he was unable to move. Dr. Williams prescribed for him the hydriodate of potass, which in the course of a week so much relieved him, that, at the expiration of that time, he could walk about the ward. The ulceration of the nose and pharynx varied, sometimes for the better, and others for the worse, and has not apparently, been the least alleviated by this medicine. He still remains in the hospital for this latter disease, but the pains have not returned. The hydriodate, after being discontinued for three months, within the last week has again been prescribed, and certainly with slight beneficial improvement.

Many other cases to illustrate the efficacy of this medicine, on this particular stage of the disease, we could subjoin from the above hospital, but most of them so nearly resemble those we have already observed, and the control of this medicament over certain stages of this disease being so satisfactory, that a further number of cases we fear would be tedious. Nevertheless, as a still further proof of the effects of this medicine, we cannot do better than subjoin a case illustrated by Dr. Williams before the College of Physicians, and which, in fact, appears to be the chief cause of his persevering research.

Case VII.—Isaac Chitton was admitted into St. Thomas's Hospital 17th January, 1831, with large periosteal nodes on each tibia; his sufferings were most severe, and his health was much impaired. The first medicines, that were prescribed for him, were mercurial, and he was salivated, but his pains returned as soon as his mouth healed. A decoction of smilax aspera was next tried, but without success. On the 7th of April, therefore the decoction of sarsaparilla was substituted, and which was taken till the 2d of June, a period of nearly eight weeks, but still there was no alleviation of his sufferings; on the contrary the first phalanges of the second and third fingers of one hand became thickened, and in a short time the inflammation terminated in necrosis, so that one finger was obliged to be amputated; and this untoward event occurred in spite of the application of leeches and a variety of local treatment, as also minute doses of the pil. hydrargyri, and of colchicum, and of the nux vomica, which was tried when the other medicines failed in producing any good effect.

The parts having healed, experiments became necessary to save the other finger, which seemed to be rapidly running into a similar state of necrosis. On the 2nd of July, therefore, and not until nearly six months after his admission into hospital, five grains of the potassæ hydriodatis, out of camphor mixture, were ordered three times a day; and this quantity was, during some part of the treatment, increased to ten grains. The results were most happy; his pains were relieved, the nodes subsided, and his finger was saved. The patient subsequently laboured under iritis, ulcerated throat, affection of the nose, and also of the skin, as also of the ligaments and synovial membrane of the joints, and was consequently under my care or observation for at least twelve months afterwards, but had no return of the periostitis.

Case VIII.—The treatment of this case had scarcely terminated, when the coachman of a member of parliament was admitted into St. Thomas's Hospital, with an exactly similar state of the tibiæ, and of the phalanges of the fingers. This man had been for many months under a treatment by mercury and sarsaparilla, and was so reduced by constant suffering that his family thought his death inevitable. Eight grains of the hydriodate of potass were directed to be taken by this person three times a day; and in two months he was discharged cured.

A vast number of cases might be cited from the wards of Drs. Elliotson and Roots, which have been controlled by this medicine; but these gentlemen have not only been satisfied with its internal effect, but have had the iodine ointment rubbed on the affected surfaces, and I think I may say in every instance attended with the most beneficial result.

Rupia has also been checked by the internal use of this medicine; but in almost every instance, owing probably to some peculiar state of constitution, this disease has remained stationary while under its influence; and the cases that we here subjoin, in proof of its efficiency on this state of the disease, it will be right to observe, the patients who were submitted to its use had no periosteal inflammation.

The first was a man named Lucrane, admitted under Mr. Tyrrel's observation. He was attacked with rupia, which extended all over his body; the ulcerated patches increased in size; his consitution became so much debilitated, that no hope of his recovery was entertained. Sarsaparilla and almost every remedy that could be suggested, were had recourse to, but without success. At last, Mr. Tyrrel prescribed for him the mistura potassæ hydriodatis three times a day:

Iodine gr. ss.
Potass. Hydriodat. ℥ss.
Aquæ Puræ ʒ viij.

Fiat mistura, cujus sumat cochlearia iij ampla ter die.

After a short perseverance in this treatment the ulcers became healthy, his constitution improved, and, after continuing it for some time, he became well enough to leave the hospital. It is now since the commencement of 1832 that he was attacked: the disease has not since returned, and he remains in a tolerable state of health.

Another similar case to the above, after suffering for a long time with ulcerations about the face, nose, and various parts of the body, was put under the influence of this medicine by Mr. Travers; the parts kindly healed, and he became quite well. Some months afterwards, the disease again made its appearance, for which he has been since admitted into the hospital. He is now taking the mistura potassæ hydriod. three times a day, and the disease is rapidly disappearing.

From the preceding observations, this medicine appears to have a specific control over the distressing pains resulting from this disease and appears to check the osseous deposition, which is the commencement of the hard periosteal node, and in many cases causes its entire disparition. Another most happy result from this medicine is (and which puts it beyond comparison with the powers of mercury) that we have not those distressing effects arising from enlargements of the salivary glands, which so often passed into a state of suppuration, debilitated so much the constitution, that death frequently was the result. There yet remains much to be done; the good effects of this medicine, in particular stages of this disease, are any thing but satisfactory, for instance, there are, at this present time, cases in the hospital in which the syphilitic eruption has disappeared under its influence, and others in which it has remained stationary; again there is a case of caries of the bones of the nose, which has been greatly mitigated by its use, and another which we have recorded above, in which no beneficial effects were observed. However, by comparing these two cases together, one suffering excruciating agony from pains and periosteal inflammation, whilst the other merely had slight roughness of tibial periosteum, its different effects are not surprising; and further, when it be recollected during the time the former suffered so severely from the pains in his limbs, the disease of the nose remained in a state of torpitude. Thus, then, when disease is set up in two different tissues of the body, we observe the virulent effect of one checking the progress of the other, so we must expect with medicine in controlling the most severe form of the disease, that all its powerful agents are absorbed by the one, which, until entirely eradicated, are unable even to mitigate the other. In Case VI. it will be observed that the medicine was left off after one form of the disease had been checked, and when continued three months afterwards, its effects over the other form became manifested.

Thus, then, we can observe the happy effects of medicine over such a specific and deadly poison, combated in one form by mercury, another by sarsaparilla, and in the third by hydriodate of potass, the latter medicine subduing the last stage, which is increased, if not often produced, by the former.—*Lon. Med. & Sugr. Jour. July* 1834.

RE-APPEARANCE OF MALIGNANT CHOLERA.

We regret to state that a case of blue cholera was admitted into the Westminster Hospital on Tuesday last, and another occurred at the Western Dispensary, Charles-street, Westminster. The first patient was removed to a workhouse, and died in a few hours; the second was pulseless when we received our information on Wednesday, and has since died.—*Lon. Med. & Surg. Jour. July* 1834.

CASE OF ELECTRICITY IN FEATHERS.

Case in which urgent symptoms of Asthma appeared to be induced by the Electricity excited by New Feathers. Communicated by John Ross, Esq. Surgeon, Auchtergaven, Perthshire, Licentiate of the Faculty of Physicians and Surgeons, Glasgow.

James Critchton, a stout athletic ploughman, aged 30, residing at Broompark, Auchtergaven, Perthshire, having been recently married, took up house on the 1st April last year, when, upon retiring to rest for the first time in his new home, he was seized with a difficulty of breathing, which, for the space of three weeks, gradually assumed a more alarming aspect, and finally compelled him to remain whole nights by the fire, the sense of suffocation while in bed being so intense. In this situation the invalid had recourse to blistering,

which had the beneficial effect of lessening its virulence for the time; but the anticipated result not being realized by this treatment, the idea suggested itself, that as the dwelling in which he resided had been recently repaired and plastered, it was probable that his complaint derived its origin from this source. By advice, therefore, he removed to his father's house adjoining, where he remained till the 20th May. This arrangement, however, likewise proved unsuccessful; the nocturnal paroxysms were as frequent as ever, and his constitution was gradually yielding to the ardour of his complaint.

As he had frequently, previous to this, consulted several medical practitioners, and by their instructions had used several antispasmodic purgatives without any apparent relief, he now resolved to leave home, in hopes of deriving benefit from a change of air. He returned upon the 25th May, having been absent five nights, during which period he slept soundly and unmolested by his former visitor. Conceiving that he might now enjoy the pleasures of his own bed, he again returned; but his tormentor was still an occupant of the dwelling. He retired two nights in the barn, but here likewise did his nocturnal foe pursue him. In this situation he again had recourse to his father's roof, under which he enjoyed the best of health for the space of three weeks, but at the expiration of which his complaint returned with increasing severity, and continued nearly a month.

In this situation he again had recourse to a change of air, and during the week that he was absent was free from his ailment. He returned again to his father's house, where he continued some days unmolested. From this he removed to his own house where, from the virulent attacks of his former complaint, his health was so much impaired that serious apprehensions were entertained of his recovery. At this time he left home again for a few days, and was tolerably well. A return to his own house, however, precipitated him once more into his former trouble. After a week's fruitless efforts to enjoy repose during the night, he removed to a friend's house, where, for the space of a fortnight, he slept tranquilly, never experiencing any return of paroxysms. His father's house for a considerable time subsequent to this period proved equally successful, but he was still convinced that the old neighbour continued to reside in his own house, by the frequent unsuccessful attempts at repose that he there experienced.

When he waited upon me about six weeks ago, I called to recollection a statement that I had somewhere read relative to the effects of electricity in feathers, illustrated by a case in some particulars similar to the present. I asked my patient if it was a feather bed that he slept upon, but was answered that it was chaff. In the course of conversation, however, I discovered that the bolsters were feathers, and requested him to discontinue their use, and substitute chaff in their place, and let me know the result; when, upon calling next day, I found what I had anticipated, that he had passed a a sound night. I then requested him to continue the chaff for a few days longer; he did so, and remained perfectly free of his complaint. I then requested him to try one night again upon his feather bolsters, but not for some time could he be prevailed upon to make the experiment; and when he did muster resolution enough to make the trial, his old complaint returned with its usual violence. In this situation he threw the bolsters from him violently, and was an hour or two tormented before the paroxysm ceased.

I have ascertained beyond the possibility of doubt, that, at the time he had been afflicted in his father's, &c. his own feather bolsters had been removed thither. In short, no night did he sleep upon these bolsters but he experienced the nocturnal paroxysms. Though sometimes he was affected immediately on going to bed, yet frequently two or three hours elapsed ere he was attacked.

It may be worthy of remark, that he had regularly slept upon feather bolsters during the former part of his life without feeling any such sensations; but that these were old, whilst the present were new. His wife, and other individuals, had slept upon them during the most part of this period, without experiencing the least inconvenience.—*Edinb. Med. & Surg. Review. July* 1834.

DEATH OF ST. JOHN LONG.

Mr. St. John Long died at his house, in Harley-Street, on Friday, the 4th instant, of what the newspapers have been instructed to call hæmorrhage from the lungs, but which we have reason to believe was common pulmonary consumption, accompanied by spitting of blood. He was unquestionably the most successful quack of the day—at least in one sense of the word—while the complaint which proved fatal to him forms a curious commentary on the blind and imbecile credulity of his dupes. He could not arrest in himself the effects of that disease which he gained a fortune by pretending to cure!—*Lond. Med. Gaz. July* 1834.

LEGAL MEDICINE AT MONTPELLIER.

A professorship of Chemistry and Toxicology has just been founded by the Faculty of Montpellier. Toxicology is thus separated from the chair of Legal Medicine,—an arrangement by which several advantages are gained. Among these we may enumerate the following:—1. The course of Legal Medicine, already quite too extensive to be efficiently taught in a single session, is now divided into proper departments.—2. Legal Medicine, being detached from Legal Chemistry, can now be taught in a superior manner by accomplished physicians and surgeons, who may not happen to be profound in general physics or chemistry;—and, 3. Toxicology will be better taught by an individual specially qualified, and who shall be a first rate chemist. M. Berard, already so distinguished as a physician and a chemist, has been named as the first occupant of the new chair. The professorship of Legal Medicine is at present vacant, but will be filled,

by *concours*, on the 1st of December next.—*Journal Hebdomadaire.—Lon. Med. Gaz. July* 1834.

GUY'S HOSPITAL.

Operation.—Removal of a great portion of the upper jaw-bone.

On Tuesday three operations were performed at this hospital by Mr. KEY. As one of the operations was intended for the removal of the greater portion of the superior maxilla, a large number of pupils was collected on the occasion. The first patient who was brought into the theatre had a large steatomatous tumour on the right shoulder. This was speedily removed; as, likewise, was the inferior limb of the second patient, who had an incurable disease of the tarsus. The third case, the one of most interest, was now introduced. The man, John Harlow, is of middle age, and was admitted into the hospital about a fortnight back, with a malignant fungoid disease of the superior maxillary bone, filling the greater portion of the antrum. It had existed some months, and was gradually enlarging. The disease first commenced in the alveoli. Mr. KEY, from the nature of the case, knowing that death would be the inevitable result if left to itself, resolved upon removing the whole of the diseased part. The patient conducted himself during the operation with the utmost fortitude. In commencing the operation Mr. KEY made his first incision in a curved direction, from the angle of the mouth to the external angle of the orbit. In this first incision, the transverse facial artery was divided, besides other enlarged branches from the facial, which required to be secured. The integuments and muscles were then dissected from the portion of bone to be removed, when a powerful pair of bone nippers were used, first to divide the maxillary bone at the juncture with its fellow, then across the bone through the antrum Highmorianum, carefully avoiding injury of the floor of the orbit. The palatine plate of the palate bone was removed, and, probably, a portion of the pterygoid plate of the sphenoid bone, where it lies at the back of the antrum. The vomer was not injured or disturbed.* A considerable quantity of bloo I was lost, but not to an alarming extent. The operation was completed in the course of about 20 minutes, with a creditable degree of coolness and firmness.—*Lancet, July* 1834.

NOTES OF A CASE OF FISTULOUS OPENING OF THE STOMACH, SUCCESSFULLY TREATED BY DR. J. H. COOK.

Some time in the month of February, 1832, Dr. Bardwell and myself were called to visit the widow D., aged 39 years. We found her, as near as may be, in the following condition:—a fistulous opening, immediately by the side of the umbilicus, into which a buck shot might have been readily passed. On removing the bandage, a gill of bile was suddenly discharged, after which, a small quantity of a different (the gastric?) fluid, came slowly away; these discharges were attended with great pain, on account of their acrid quality. The whole surface of the abdomen was excoriated, inflamed, and intolerably painful. We introduced a flexible catheter its whole length, thirteen inches, before meeting with any resistance, when the extremity suddenly met with an obstacle. By pushing it against the resisting body, or even by slightly agitating the instrument, strong efforts to vomit were produced.

Withdrawing the catheter, we desired her to drink a glass of water; she did so, and in twenty seconds the *whole* was discharged through the fistula, as we ascertained by measuring it. The direction of the fistula was upward, and slightly inclining backward, with about the same inclination to the right side. We came to the conclusion, that the opening within was at, or about, the pyloric orifice of the stomach; and that the catheter entered the stomach, and pressed against its cardial portion. The patient even felt it there, and applied her hand externally over that part.

Treatment.—Taking a large beef's bladder, we cut it open longitudinally, spread it well with adhesive plaister, and after washing the inflamed surface, and dress it with basilicon spread on fine linen, we applied the bladder over the abdomen, and made an opening over the fistula, through which the matter might escape. We then applied a bandage and compress, and directed that it should be re-applied immediately after each discharge. We advised mucilaginous drinks, and a diet of rye-mush and molasses, and nourishing enemata. The patient was much emaciated for want of proper nourishment, as every thing passed off undigested through the fistula. No evacuation had taken place in the natural way, for ten days previous to our visit. The external irritation of the abdomen soon healed, and the bladder was then applied to the skin as a protection, and continued there with the happiest effect. The bandage was gradually tightened, and a compress of a cylindrical form was laid over the course of the fistulous canal. By these means our patient regularly, but slowly, recovered. In a few days the alvine evacuations were restored to their natural outlet, and the discharges from the fistula began to decrease. In thirty days the opening was closed, and the fistula apparently obliterated. Several months have elapsed since that event, and she continues in excellent health.

All we could collect from her, as to the history of her case, was this: six months before, in one of the south-east counties of this State, she was attacked with constipation and violent pain at the pit of the stomach, which resisted every remedy, till the 19th day, when the fistula shewed itself.—*Western Jorn. of Med. and Phys. Sciences, America, January* 1834.—*Lon. Med. Gaz.*

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* The inferior surface of the orbitar plate of the sup. maxilla was found to be entirely free from disease.

HÔPITAL DE LA CHARITE.

Luxation of the Head of the Humerus downwards reduced six months from the time of Displacement.

This accident occurred in a man 56 years of age, in consequence of a fall, in the first place on the palm of the hand, afterwards on the shoulder. The nature of the accident was at first mistaken, and treated for contusion. The patient after suffering six months, without regaining the movements of his arm, came to Paris, to be received into the above hospital. The existence of a luxation of the humerus downwards was very manifest. The first attempt at reduction proved ineffectual, and the shoulder by M. Roux's directions was to be constantly fomented by emollient applications.

The second attempt, after keeping the parts in a state of extension for twenty-five minutes, reduced the luxation. The method adopted by M. Roux was direct and horizontal extension, such as described by N. Boyer.

This observation is worthy of notice, in showing what extent of time may elapse, and the bone be replaced in its natural position.—*Lon. Med. & Surg. Jour. Aug.* 1834.

USE OF PLASTER OF PARIS IN THE TREATMENT OF FRACTURES.

To the Editor of the Lancet.

Sir,—The extensive circulation which your Journal so deservedly enjoys, affords us the best means, of communicating to the medical profession, a mode of treating simple oblique fractures (particularly those of the thigh), which, although not unknown, has never hitherto been brought into practice. The mode of treatment alluded to, is, that of confining the limb by means of plaster of Paris. A recent successful case induces us to submit the subject to the consideration of the profession, at the same time anticipating a difference of opinion as to the expediency of the plan. We recollect, indeed, reading an article, some time since in one of the medical periodicals, in which a method, proposed for treating fractures with plaster of Paris, was strongly condemned by the editor as *impracticable* and *injudicious ;* but as we have heard Baron Larrey say, that during the Egyptian campaigns of Napoleon, he had with benefit employed it in small quantities round facturned limbs, with the idea of preventing irritation during travel, we considered it might be tried without incurring a charge of rashness.

—— *Tinney*, of Walton, near this place, æt. 19, of muscular habit, in the month of December last, broke the right femur, in the upper part of the lower third, by a fall from a cart. The patient was put in Mr. Amesbury's splints. On the following day, the limb being much shortened, gradual extension was made; the pulleys were used a second and third time during the five following days, notwithstanding which the ends of the bones could not be kept in apposition, from the extreme obliqueness of the fracture. Finding, on the sixth day after the accident, that it would be impossible to prevent a shortening of the limb, we determined on the application of the plaster of Paris. A deal box or trough was prepared, six inches in depth, and of sufficient length to take the whole of the limb from the pelvis, and in this box the leg was placed. A hole being made through the end of the box to admit of the pulleys, and the limb being strapped with soap-plaster from the heel to the nates, and well smeared with oil, extension was made from the foot, and the fractured bones were brought in apposition. The plaster of Paris, in a liquid state, was then poured into the box, until it covered the limb to the depth of an inch.

To guard against possibility of inconvenience from tension, as soon as the plaster on the surface had assumed such a consistence as to admit of its being divided by a spatula, a groove, an inch and a half in width, was made in it on the anterior part, extending the whole length of the limb, so that any change which took place might be distinctly observed. The plaster, of course, within five minutes from its first application, assumed a perfect consistence and hardness, and thus the limb remained during five weeks, at the end of which period the apparatus was removed, and the leg found to be perfectly straight and not shortened. The box and plaster mould we have sent to the College of Surgeons, where it may be seen. On inspection of the mould it will be obvious, that, if necessary, the plaster could have been at any moment removed from the limb without the slightest inconvenience to the patient, and in much less time than a bandage.

It has been suggested, that the heat given out by the plaster during the process would be so great as to prove inconvenient ; this, however, is not the case. The only inconvenience which arose from the last time of reduction till the union of the fracture, was a little tenderness of the skin just over the tendo achillis, produced by the web of the pulleys being moulded with the limb, which in future might be avoided by slackening or removing it after securing the thigh.

In consequence of the success which attended this experiment, we have since made several moulds, and are so thoroughly convinced of the superiority of the plan of treatment, that we should not hesitate to apply it to compound fractures. As these observations may, we hope, induce other surgeons to adopt this practice, a few hints, will not, perhaps, be wholly undeserving of attention. By mixing *chalk* or *whiting* with plaster of Paris, the composition remains from four to ten minutes, according to the quantity of chalk used, as manageable with the trowel as common mortar. The limb being placed on a board, and extension kept up gradually, till the fracture be reduced, a tolerable quantity of the plaster of Paris and whiting is to be placed far enough round the thigh to include the trochanter major, and to pass between the pubes and scrotum, the latter being protected by means of oiled lint. These two resisting points being secured, the condyles of the femur are to be managed in like manner; the operator may

then cover the thigh as much as he pleases in a *simple* case, but in *compound* fracture the plaster should merely be applied so as to unite the points of resistance at the groin with those at the knee. As by possibility inflammation or erysipelas might supervene, the two bodies of plaster of Paris above and below, covering the limb, should be united with a greater or less quantity of the plaster, according to the injury done to the soft parts, so as to admit conveniently of the application of poultices or lotion in case of need.

In fractures of the upper third of the femur if the bent position should be thought necessary, a single inclined plane will be found most easy to manage, by making extension from the *foot*, the pulleys being fastened to the ceiling; but should the comfort of the patient require relaxation of the flexors of the leg, the condyles might be secured first, and the knee bent afterwards. We have alluded more particularly to fractured *thighs*, as they are the most unmanageable, and most often the cause of shortened limbs.

Although the detail of this mode of treatment has necessarily encroached somewhat on your valuable columns, we hope it will not be thereby inferred, that in its application it is attended with more than ordinary trouble to the operator; on the contrary whilst the benefit to the patient is so great the surgeon will not find it consume more of his time than the ordinary and more familiar method. This remark arises from the desire we feel to obviate every objection which might be urged against the remedy; but we are confident that the members of our profession are far too alive to the calls of suffering humanity, to allow personal inconvenience to influence them in their selection of a remedy.

Before concluding, we may express our opinion that, in fractures of the neck of the thigh bone, motion of the limb would be more readily prevented by confining both trochanters by means of the plaster of Paris than by any other plan hitherto adopted.

We are, Sir, your obedient servants,
BOND AND GALE, Surgeons.

Glastonbury, Somersetshire.—*Lancet, Aug.* 1834.

CHOLERA IN LONDON.

In 1831 we have seen how small was the number of deaths which occurred during the six warmest months; but in 1832 not fewer than 1006 fatal cases of cholera are recorded in the Bills of Mortality for July alone —380 of these having occurred in one week. In August they fell to 777, after which they progressively diminished till the end of September, when they became very rapidly extinct.* The temperature at this time was not particularly elevated, averaging about 65 degrees, but the vicissitudes were frequent and considerable, and in one instance very remarkable, viz. at the end of the first week in July, and just before the epidemic underwent a marked excerbation, the thermometer ranged within twenty-four hours from 40° to 71°, a difference of not less than thirty-one degrees. The prevalent state of atmosphere during the above period was cloudy, with frequent rain, and a good deal of thunder.

In 1833 the disease again shewed itself in July, during which month there occurred 181 cases; while we have 853 in August, the epidemic diminishing in September, and disappearing more rapidly than the preceding year. The weather during its prevalence was very similar to that of the preceding year.

In 1834, the month of July once more gives us the "blue plague," but only 37 cases; the weather having been warmer, and much drier than during the preceding years; and the disease increasing on the atmosphere becoming damp.—*Lon. Med. Gaz. Aug.* 1834.

* This and the following can only be considered as an approximation, owing to the manner in which the Bills are made out, and to their not comprehending the whole town.

CASE IN WHICH A FEMALE CATHETER ACCIDENTALLY SLIPPED INTO THE BLADDER.

To the Editor of the Medical Gazette.

Sir,—In your journal for September last* I related the history of a case in which a female catheter had accidentally slipped into the bladder, where it remained fifteen days, without occasioning much irritation, when it was removed by dilating the urethra with a sponge tent. It is rather singular that another case of the same kind should so soon have fallen under my observation.

Elizabeth Creed, aged twenty, married about four months, had retention of urine, and was relieved several times by the catheter, when, in passing it one day, it unfortunately slipped from the surgeon's fingers into the bladder. No attempt was made to extract it, and about a fortnight afterwards she was brought, from a distance of thirty miles, to the Bridgewater Infirmary. Having ascertained the presence of the instrument, I introduced a piece of sponge tent, in the evening, into the bladder, and allowed it to remain during the night. On the following morning I withdrew the sponge, and passed my finger, with some difficulty, into the bladder, and felt the catheter resting on the pubes; from whence it was removed into the urethra, and readily extracted. In this case the instrument remained in the bladder seventeen days, and created considerable irritation. There was much greater difficulty in dilating the urethra in this case than in the former one, which occurred after delivery; in the latter, the urine passed involuntarily until the fourth day, but in the former the urethra regained its power immediately.

Two such cases having been brought to my notice in so short a period, it would appear that this accident is not of such rare occurrence as is generally imagined; and with the instruments usually employed, may frequently happen from sudden shrinking, or change of

* Vol. xii. p. 837.

the patient's posture. It may not, therefore, be amiss to caution my professional brethren against using the common silver catheters, which are rarely provided with guards. Of late I have preferred a long flexible catheter, which is more convenient, particularly in all cases where it is necessary to empty the bladder during labour.—I am, Sir,

Your obedient servant,

JONATHAN TOOGOOD,

Senior Surgeon to the Bridgwater Infirmary.

Bridgewater, July 21, 1834.

THE INDIA
JOURNAL OF MEDICAL SCIENCE.

CALCUTTA; JANUARY 1, 1835.

We have been favored by the Medical Board with the following extracts of letters, from Mr. Panton, Superintending Surgeon, dated Nusseerabad, 20th November, and Dr. Pringle, late officiating Superintending Surgeon, Saugor Division, dated Saugor, 21st November last.

In forwarding the monthly returns, I adverted to the prevalence of intermittent fever in this part of the country during September last, the number of cases augmented greatly in course of October and the disease was widely extended over every station within this Division; the sick averaging about 1-5th of the strength of Corps.; in the 17th N. I., at Nusseerabad it exceeded that proportion; though common at Mhow it was less so than at the other stations.

The disease was not severe usually, nor did it seem to reduce much the strength; but it was very irregular in its attacks and the men when early returned to duty were very liable to a relapse; from exposure to the intense heat of the day, and the chilly cold of night.

The cases which resisted the ordinary treatment have commonly yielded to the use of quinine. Of late bowel complaints have supervened and terminated fatally in some cases. But I have the satisfaction to add, that it is now moderated much both here and at Neemutch. The Corps moving from the Provinces to this Division, are remarkably healthy.

The fevers this month, as last, have been marked with strong symptoms of congestion, attended in several cases with great prostration of strength, constant sickness at stomach and sudden sinking. The state of the pulse not in general admitting of general bloodletting, leeches have been profusely applied though in some cases without any apparent benefit; the patient sinking with many of the symptoms of Cholera. No less than five fatal cases have taken place amongst the Europeans. These I enclose, and also the case of Captain Campbell, of the 29th Regiment N. I., who died after an illness of only eight days.

Fever, amongst the Native Troops, has also been very prevalent, followed by excessive debility, and frequent relapsed symptoms of congestion have also in some cases shewn themselves, though to a much less degree than amongst the Europeans; 14 deaths have occurred, mostly from bowel complaints supervening on long continued and repeated attacks of fever. The 4th Regiment N. I. marched from this on the 20th ultimo, but from extreme debility of the men and having rather severe duty, being in charge of treasure, they were obliged to halt at Huttah, eight marches from this. Lately more favorable accounts have been received and they had been enabled to resume their march though obliged to leave a number of sick behind.

The discovery of Iodine is one of the most valuable boons which chemistry has conferred on modern medicine. Important facts are daily occurring to strengthen its claims to the attention of the practitioner. A few years ago, and this remedy and quinine were unheard of! Does not this simple fact show the necessity that the medical man is under, of constantly keeping up his knowledge with the march of that noble science, of which the grand object, is the removal or alleviation of human suffering? The time is not far distant when in India, but few deemed it requisite to add to the stock of knowledge laid up in the schools. Indeed the means of self-improvement were, not many years back, comparatively scanty, while some lay the flattering unction to their souls that they knew quite enough for all useful intents and purposes, and that they could manage very well without involving themselves with new-fangled notions, or 'out of the way,' remedies as they conveniently considered them. ONWARD is still the word of the age, and the medical man must keep it in recollection, unless he pusillanimously consents to fall into the rear. Come what may, he must still continue to study and examine new facts and opinions. Not a week, not a month passes, but something occurs in the living history of the profession which he ought to know. We suspect that this is a point which has entered very little into the consideration of the politician and statesman, especially in India. Books and especially periodical works in medical science, are, we may say, a part of medical armour. In what portion

of the British Colonies, are the obstacles to such finding their way to the student, greater? The expense is so enormous, that for the majority, the idea of getting the English medical periodicals is quite out of the question. Hence the absolute necessity of a work like this journal, which in addition to the original papers which it from month to month stimulates into existence; also supplies extracts from British and foreign medical periodicals, which otherwise would be inaccessible to many of our brethren in the East. The second year of its existence opens much more auspiciously than the first, inasmuch as its resources are now sure, and its connexions extensive. At first indeed, we had to rely on the kindness of friends for the loan of their medical periodicals, in order to supply the journal for selection *materiel*. Now we regularly receive our own from London, and have accordingly an ample command of means. To the members of the profession throughout the country we must look for the rest, and we do so confidently, judging from the spirited support which we have received from our kind and able contributors during the past year.

One of those, with reference to the subject touched upon at the commencement of our editorial remarks has presented us with some interesting cases, which carry their own recommendation. The hint thrown out in regard to the use of Iodine in that disease of the horse termed bursauttee, we hope will not be lost sight of by our readers—especially such as have made themselves conversant with veterinary science.

Mr. Tytler has at somewhat greater length than we could have wished, consistent with other demands upon our space, enlarged upon a text mooted by Mr. Campbell in our No. for September last; respecting the want of confidence evinced by a Native Doctor educated at the Native Medical Institution, in European Medical skill, even at a juncture of great urgency to himself. Whatever besides the case stated by Mr. Campbell evinced, it sufficiently demonstrated that the trust reposed by the individual in question, in the efficacy of professional rules which he had acquired at the public expence, was but very slender; whence it might be inferred that in the practical application of such rules to others, his success was not likely to be very great, seeing that conviction and the zeal which it begets, were totally wanting,

In the contrast which Mr. Tytler enters into in his remarks upon Mr. Campbell's paper, respecting the present and past state of the Native Medical Institution; he with an excusable leaning of partiality, takes care that as respects himself, the contrast should be any thing but unfavourable. For ourselves, we have no reason to conclude that the pupils of the present day carry with them a greater stock of u seful acquirement from the institution than they were wont to do in Mr. Bretou's time. At any rate, in the nature of things, we conceive that the difficulties which Mr. Breton had to contend against, since he was it may be said a Pioneer in the field, could not be exceeded by any experienced on the part of his successor: and in industry and qualifications for the situation, Mr. Breton certainly was second to no one that we are acquainted with, and we question very much whether the service practically and essentially, has benefited much by the "regular system of Auatomy, Physiology or Nosology," as taught at the institution and that this should be the case is no fault of the superintendent, but of his want of means, for surely he will admit that Anatomical knowledge not grounded on actual dissection of the human body, must be but a sorry preparative for Physiology and the practice of Surgery.

With reference to the quoted saying of the lamented Dr. Adam, it is to be taken *quantum valeat* as a casual remark in common conversation. Mr. Tytler lays a great deal more stress upon it, than he appears to have been warranted in doing. We well understood our friend's general sentiments upon this subject, and what he justly ridiculed, was the laying stress upon comparatively unimportant minutiæ to the neglect of more solid acquirements: for even in Mr. Breton's time we were struck with the glibness of some of the pupils upon the minute anatomy of the Brain, which we presume to a class of superior compounders (for such the Native Doctors educated at the institution were then considered, and such we are inclined still to consider them) might be supposed as of but questionable utility.

In regard to Mr. Tytler's first query, we have not ourselves observed that European

medical men get into the habit of treating natives and their complaints with hauteur and indifference; but can readily upon his own shewing suppose that such may be the case, as there is no end to the anomalies of human character; and a Radcliffe and a Halford may both each in his way be popular. But is such hauteur or indifference confined entirely to European practitioners; have the natives no rough spoken Dr. Radcliffes or courtly Vaughans of their own? The history of the particular case under discussion is utterly at variance with this supposition, for Mr. Campbell appears to have taken pains to point out to the foolish fellow the absurdity of the course he was pursuing.

Mr. Tytler's second question we think should be answered in the affirmative. Undoubtedly many European medical men are not sufficiently acquainted with the popular languages of the country. Native Doctors however, do as far as we know, full well comprehend the meaning of their employers, for it must be recollected that this is not a point at issue between Europeans and Natives in general—but between a higher and lower class of practitioners.

With reference to Mr. Tytler's third query, we cannot reply in the affirmative, but this we can state as a positive fact; that we have seen Natives (under providence) cured by European skill, when they were left to perish, not merely by the practitioners of their own country, but by their own kindred.

We have also heard of such *coup de main* treatment as that alluded to by Mr. Tytler in his third query, but terminating in a very different manner from that which he infers. This is an objection, however, that may apply to the practice of the most accomplished European practitioner. It is one of those remarks that cuts both ways, and proves nothing.

We are quite ready to concur with Mr. Tytler that quackery unfortunately abounds in even the most civilized countries; but where do we find, as in Mr. Campbell's cases a medical man preferring for the cure of his ailment the advice and aid of a common soldier to those of a professional adviser? All that Mr. Tytler has adduced respecting St. John Long, or the Homœpathic doctrine, may be very just in the abstract, but we humbly submit is not relevant to the matter under consideration. Dr. Campbell has not in his paper contended that Native Doctors alone among the sons of Adam should be free from prejudice in favour of quackery, but he does give a case where the prejudice was extraordinary as occurring in a medical man (of a humble grade true) but who ought to have known better—and who of course if he had conscientious feelings on the subject would do to others as he had done to himself, when an opportunity offered. If there are many who have such prejudices, they would be wholly unfit to attend upon European patients—and it is with reference to such a contingency that Mr. Campbell, if we correctly comprehend, argued.

The instance of Kishna Ram Doobey, the vaccinator, adduced by Mr. Tytler, makes strongly for Mr. Campbell's argument, and not at all as far as we can see for Mr. Tytler's. It is a sort of ditto ditto repeated of the Nipal case, save that in one a life was lost through the stupid prejudice of the individual, and in the other nearly compromised.

Mr. Tytler is not we conceive, borne out by the record when he avers that Mr. Campbell condemns a whole class of Government servants in the lump; neither can we concur with him when he asserts, that there is more confidence reposed in them than in any other body of natives. To concur in this would be to admit that they exceed even the Sepoys themselves in trust-worthiness. That they may be superior to the Native Doctors of other days may be a fact known to many, but we cannot rank ourselves among the number, as we have heard very little about them, and Mr. Tytler's own testimony, which is highly honorable to them, is the most pertinent and decisive that we can remember, but still, it must be taken as that of a biassed party.

We quite concur with Mr. Tytler in deeming that it will be a considerable time indeed, before the generality of the population will be led either to admit the advantages of European practice or to allow it to be employed upon themselves; but that is no reason whatever, why Europeans should indolently fold their arms and not endeavour to get over the difficulties in the way. Per contra, a Rammohun Roy, or a Mohun Lal is a talismanic illustration of what native mind is capable of doing when it is brought into idiomatic colli-

sion with English literature and intellect. Considering the difficulties that stood in the way, it is really surprising how much has been effected for the last few years in stimulating the natives to improvement. Has this improvement been quicken'd by a knowledge of Arabic and Sanscrit, or by confining native aspirants to that slough of Depond? Experience answers, *no*, for the more we have departed from the Sanscrit and Arabic system, the greater and the more rapid has been the advance of knowledge; and so will it be in regard to Native Doctors also—and the sooner they are made to look up to the English language as the " steep, where fame's proud temple shines afar," the more efficient will they be found for the purposes of the service. Look at the readiness and fluency with which they take up repulsive points of knowledge, and technical terms? With how much greater avidity would they proceed if led still further into the pastures of knowledge, instead of getting a peep at a small glade through the narrow vista of translation?

That the natives despise our practitioners; as utterly ignorant, because they are acquainted neither with Oriental books nor Oriental treatment, only shows their own besotted pride of a still more deplorable ignorance. But what books are there, and what is the boasted treatment that we are so ignorant of? If the former are so very valuable, Mr. Tytler would confer a great service on mankind by translating one or more of the most complete of them into the English language, for the good of his professional brethren of Britain, who sojourn in the East, and who for lack of such a guide are apt to suppose that the medical books of the natives are not very valuable nor their treatment in general, nor founded on very scientific principles. That natives neither want, nor will accept of our advice, is too unqualified an assertion, as the growing demand for articles of European Materia Medica, quinine for instance, were there no other evidence, sufficiently shows. This assumption though partly disproved by the letters of his own correspondent, Mahommed Hossain; furnishes Mr. Tytler with a foundation, (a fragile one to be sure) for another, involving we suspect the whole gist of his argument. " This," he proceeds, " demonstrates the fallacy of those schemes for native medical education, which go upon the supposition that pupils well acquainted with the European system, would make their way as general practitioners among their countrymen." What schemes does Mr. Tytler allude to? This he leaves us perfectly in the dark about. The only approach to such a scheme reduced to practice, that we are aware of, is the establishment of the medical class of the Sanscrit College, of which Mr. Tytler himself we believe was the first professor. With what view did Mr. Tytler lecture to the pupils of that class, on Anatomy and other branches according to the European system; was it not to enable them the better to make their way as general practitioners among their countrymen? Does he mean to maintain that the acquirement of such knowledge disqualified them for making their way—if so, it was his duty to have warned his quondam pupils of it, since it was upon practice among their countrymen that they had solely to rely for a livelihood; such not being secured to them in the service of Government after quitting the College, as is the case with the Native Doctors educated at the Institution of which Mr. Tytler is superintendent. " The truth would be," according to Mr. Tytler, " that they (persons so educated) would never finger a single rupee of fees, and would be reduced to be pensioners on European bounty from the moment their education was finished." As this is put hypothetically, we need not enter further into the consideration of it than to state, that it is not consistent with our own experience. We know that European medical men get liberal fees from native patients: can we really suppose that such would decline to consult well qualified Native Doctors, merely because they were as well qualified as European practitioners? The idea is absurd.

Mr. Tytler objects to Mr. Campbell's saying that *Persaud Singh*, the erudite-on-sympathetic-buboe, had the diploma of the native medical institution, but felicitously proves the fact which he questioned, for the man had the certificates usually granted to the qualified alumni of the establishment; for what is a diploma to all intents and purposes but a certificate?

With reference to the examination through which the students have to pass before the

Medical Board; very possibly questions of a too minute or unpractical nature may be put which might be better avoided. In England the examiner and examined thoroughly understand each other, and at a glance it can be seen and put to the test whether the latter is speaking by rote or otherwise. Here we have very cogent doubts on this head, and we feel quite certain that many of the answers must be mere parrot rote, and that the examined does not comprehend much of what he is prating about. For this, there appears to us to be only one great and comprehensive remedy; and that is, to base the instruction of native pupils upon a knowledge of the English language. Until this is done, we feel quite as convinced as Mr. Tytler does of the contrary, that the Institution cannot be such a valuable engine for conferring knowledge as it might be made; solemnly believing as we do, that a collegiate establishment upon comprehensive statesman-like and liberal principles, for commencing the good work of a thorough native medical education in this country, would prove a source of incalculable eventual benefit, no less than of great moral enlightenment and improvement. We have deemed it our duty to remark very freely upon Mr. Tytler's paper, because we conceive it has a direct tendency to obstruct this grand and beneficent object. We need scarcely say that in doing so, we are impelled by as conscientious a regard for what we believe to be the right course, as we know Mr. Tytler to entertain on *his* side of the question, which nevertheless, we submit with feelings of cordial esteem for himself personally and high admiration of his eminent talents and acquirements, to be the wrong one.

We have again been favoured by Mr. Previte with samples of his Pulverized Milk prepared upon an improved principle. The article is indeed so very far superior to what it was when we first brought it before the public, in the pages of this Journal, that there appears to be little or nothing farther to be wished. It seems to be almost entirely soluble; and to possess when in solution, to a very great degree, the flavour and properties of new milk. With the Pulverized Milk, Marine Bread, and Water, prepared by this ingenious individual, the voyager will find his comforts very largely increased.

MEDICAL RETIRING FUND.

We have at length to congratulate the Medical Service upon the establishment of a separate Retiring Fund, and the consequent prospects of a competent provision for the declining years of those who accept its annuities; and a more speedy promotion, than otherwise they could have hoped for, to those who remain.

In the letter of the Court of Directors there appears to be the important, though accidental, omission of a clause rendering it obligatory upon all who hereafter enter the service to subscribe to the Retiring Fund. But as the clause exists both at Madras and Bombay, we doubt not the defect will be remedied, so soon as it shall be pointed out, if it has not been so already.

Upon the value of the favour granted there will of course be a variety of opinions: and censures have already been passed, by certain persons imperfectly acquainted with the facts of the case, upon the Committee, for accepting it in so unqualified a manner as they have done. It is true, that all that was asked for has not been granted; but we believe the more moderate, and perhaps the best judging, of the service, never expected that it would be, even if they hoped that it should. With regard to the number of retirements, three only have been granted, through the Company's Treasury instead of the six asked for; but this, we presume, will not prevent other annuities, or even bonuses, being given through private channels, should there be found funds to provide for, or retiring members to accept them. Much more might be said, were it necessary to expatiate upon the subject, and had we leisure and space for the purpose; and the Committee of management might have been more explicit upon their reasons for the resolutions they have passed, had they thought it necessary to take careless, or indifferent persons into their counsels; or doubted of their being in full possession of the confidence of their constituents. As to the security the annuitants will have for the payment of their annuities, no doubt it will be considered ample ere those annuities are offered by the Committee, or accepted by the parties so vitally concerned.

Upon the whole, therefore, we have again to express our most decided conviction that

although somewhat short of their wishes, the Medical Service has to be thankful to the Court of Directors for a very acceptable boon, and that the Committee would have been guilty of a miserable act of folly, had they for a moment hesitated to avail themselves of it.

MEDICAL INTELLIGENCE.

GENERAL ORDERS RELATING TO THE MEDICAL SERVICE.

General Orders by the Right Honorable the Governor General of India in Council.

November 18th—No. 212 of 1834.—Surgeon John Turner is directed to to resume the duties of the General Hospital.

21st.—The undermentioned Officer has returned to his duty on this Establishment, without prejudice to his rank, by permission of the Hon'ble the Court of Directors:

Assistant Surgeon Andrew Henderson, of the Medical Department, date of arrival in Fort William, 2d Nov. 1834.

General Orders by the Vice President in Council, and Governor of Bengal.

November 11th.—No. 209 of 1834.—Assistant Surgeon John Smith, of the Medical Department, is permitted to proceed to Europe, on Furlough, on Medical Certificate.

13th.—Surgeon Alexander Halliday, M. D., is permitted to proceed to the Sand Heads, on Medical Certificate, and to be absent on that account for six weeks.

Assistant Surgeon John Wilkie, M. D., Officiating in Medical Charge of the Civil Station of Dinagepore, has obtained in the Judicial and Revenue Department, under date the 3d instant, leave of absence for one month, on Medical Certificate.

24th.—The following Officers have obtained leave of absence from their Stations:

Mr. G. N. Cheek, Assistant Surgeon, attached to the Civil Station of Burdwan, for ten days, on private affairs, in extension of the leave granted to him on the 18th August last.

Mr. A. Smith, Assistant Surgeon, attached to ditto of Jessore, for eight days, on private affairs, in extension of ditto on the 20th ultimo.

The leave of absence, for two months, granted on the 27th ultimo, to Mr. T. Chapman, Assistant Surgeon of the Civil Station of Purneah, is cancelled as requested by him.

25th.—No. 223 of 1834.—The following Arrangement sanctioned by the Right Honorable the Governor of Fort William, is published in General Orders:

Hospital Apprentice J. Healy, appointed to the Dispensary in Fort William as an Acting Assistant Apothecary, vice Francis O'Sullivan about to proceed with a Detachment of King's Troops to the Upper Provinces.

December 2d.—Para. 2. The undermentioned Officer, belonging to your Establishment, has been granted an extension of his respective Furlough for the period of six months:

Surgeon John Allan.

Para. 2. The undermentioned Officer, belonging to your Establishment, has been granted an extension of his respective Furlough for the space of six months:

Surgeon W. Hamilton.

No. 227 of 1834.—The following Lists of Rank of Assistant Surgeons, are published in General Orders:

No. 1 of 1834.—Rank of Assistant Surgeons for Bengal, and proceeding by the following Ships, viz.

To rank from the date of sailing from Gravesend of the Ship on which they embarked, and in the following order; viz.

Keith Macalister Scott, *Hashemy*, sailed 25th April, 1834.

Thomas Leckie, ditto ditto.

General Orders by the Major General or Commander in Chief.

November 11th—The Meerut Division Order of the 27th September last, directing Assistant Surgeon J. F. Bacon, attached to the Civil Station of Moradabad, to afford Medical aid to the Right Wing 14th Regiment Native Infantry, during the absence, on duty, of Assistant Surgeon Spencer, is confirmed.

Apothecary John Williams and Assistant Apothecary William Togman, lately promoted, are directed to continue doing duty, the former under the orders of the Superintending Surgeon of the Agra Circle, and the latter under the orders of the Superintending Surgeon at Cawnpore.

13th.—Medical Department—Assistant Surgeon E. Mitchell, from 15th November to 20th March 1835, in extension, to enable him to visit the Presidency, on Medical Certificate, preparatory to applying for leave to Sea.

Assistant Surgeon W. B. O'Shaugnessy, M. D., who was placed at the disposal of the Major General in Command of the Forces, in Government General Orders of the 6th instant, is directed to join and do duty with the Artillery at Dum-Dum, until further orders.

14th.—The Meerut Division Orders by Major General the Honorable J. Ramsay, under date the 25th ultimo, directing Assistant Surgeon D. Gullan to return to Shahjehanpore, and resume Medical charge of the Left Wing of the 14th Regiment Native Infantry; Assistant Surgeon J. Murray, M. D., to rejoin the 1st Brigade of Horse Artillery, and the Subordinate Medical Servants to resume the places they occupied previous to the march of His Majesty's 11th Light Dragoons and 26th Regiment of Foot, are confirmed.

25*th October*.—Appointing Apothecary John Douglas to the Medical charge of the Artillery Recruits under orders to proceed to Mhow.

26*th October*.—Appointing Assistant Apothecary John Robison to act as Apothecary, and Assist. Steward John Hennessy to act as Steward to the Artillery at Agra.

At a General Court Martial assembled at Neemuch on Saturday the 6th day of Septem-

ber 1834, Assistant Surgeon Alexander Storm, of the 51st Regiment Native Infantry, was arraigned on the following Charges :—

Charge 1st.—" With conduct disgraceful to the character of an Officer and a Gentleman, disrespect and insolence to his immediate Commanding Officer, contempt of authority and disobedience of orders, and contumacious neglect of duty, in the following instances :

" 1st. Attending the Commanding Officer of his Regiment, Lieutenant Colonel Hawes, at Neemuch, on the forenoon of the 26th June 1834, in a state of intoxication.

" 2d. Insolent and disrespectful behaviour towards his Commanding Officer, Lieutenant Colonel Hawes, on the morning of the 27th June, being rude and violent in his general manner, and insubordinate and insulting in his language and demeanour, when adverting to Colonel Hawes's notice to Mr. Superintending Surgeon Panton of Mr. Storm's state of inebriety on the previous day.

" 3d. Having, in the afternoon of the 27th June, denied the authority of his Commanding Officer, Lieutenant Colonel Hawes, to place him in arrest, even though it was communicated to him at the time, that it was under instructions from the Brigadier ; and having, after delivering his sword to the Adjutant, caused his servants to take back the sword then in possession of the Adjutant's Orderly; also refusing to return the letter directing his arrest given for his perusal by the Adjutant, and re-entering his house, cursing and swearing retaining both sword and letter.

" 4th. Having, on the morning of the 28th June, on the personal demand of the Adjutant, refused to restore the letter of his Commanding Officer, addressed to the Adjutant, which Mr. Storm had detained the previous evening.

" 5th. Having, though warned on the 30th of June and summoned on the 1st of July, to attend a Court of Inquiry sitting on his conduct, not attended the said Court, nor given any explanation of such non-attendance.

" 6th. Having, on the 2d of July, intruded himself at the Quarters of the Brigadier Commanding, in a disgraceful state of inebriety."

Upon which Charges the Court came to the following decision :

Finding.—" The Court having maturely weighed and considered the evidence produced on the part of the prosecution, together with what the Prisoner has urged in his defence, is of opinion,

" That with regard to the (1st) first instance of Charge, he is Guilty.

" That of the (2d) second instance, he is Guilty.

" With regard to the (3d) third instance, the Court finds the Prisoner Guilty of ' having, in the afternoon of the 27th June, denied the authority of his Commanding Officer, Lieutenant Colonel Hawes, to place him in arrest, even though it was communicated to him at the time, that it was under instructions from the Brigadier, and having, after delivering his sword to the Adjutant, refused to return the letter directing his arrest, given for his perusal by the Adjutant, and re-entering his house retaining both sword and letter,' but acquits him of having ' caused his servants to take back the sword' and of ' cursing and swearing.'

" That on the (4th) fourth instance, he is Guilty.

" That on the (5th) fifth instance, he is Guilty, with exception to the words ' nor given any explanation of such non-attendance,' of which it acquits him.

" That on the (6th) sixth instance, he is not Guilty, and acquits him of it ; and the Court is further of opinion, that the conduct above proved, is unbecoming the character of an Officer and a gentleman, disrespect and insolence to his immediate Commanding Officer, contempt of authority, disobedience of orders, and neglect of duty, but the Court acquits him of the words ' disgraceful' and ' contumacious.'

Sentence.—" The Court having found the Prisoner Guilty, as above specified, does Sentence him the said Mr. Assistant Surgeon A. Storm, of the 51st Regiment Native Infantry, to be suspended from rank, pay and allowances for the period of (6) six Calendar months."

Confirmed,

(Signed) JAMES WATSON, *Major General, in Command of the Forces.*

Remarks by the Court.—In awarding this lenient Sentence, the Court deems it an imperative duty to state, that as it appears on the face of these Proceedings, that Mr. Storm was in the habit of taking opium medicinally, the intoxication of which he has been found Guilty, might be attributable to the effects of this drug ; under this impression, it has passed its judgment.

Remarks by the Major General.

The Major General in Command of the Forces considers the penalty to be disproportionate to the complexion of the offences found by the Court, and the cause assigned for its lenity to be unsatisfactory.

From the papers connected with this Court Martial, it appears that Mr. Assistant Surgeon Storm was subjected to an arrest under fixed bayonets, which the Major General in Command of the Forces disapproves. Charges of the gravest nature, or apprehensions of evasion, can alone justify such a procedure towards a Commissioned Officer ; and in the present case, the severest punishment that could be awarded on conviction of the offence charged, would not embrace the indignity which Mr. Storm suffered before trial.

The suspension of Mr. Storm from rank and pay will commence from the date of the publication of the Sentence at Neemuch.

The Benares Division Orders issued by Brigadier F. J. T. Johnston, under dates the 13th ultimo and 5th instant, directing Assistant Surgeon R. Christie, doing duty with His Majesty's 3d Buffs, to proceed to Juanpore and afford Medical aid to the Left Wing of the 6th Regiment Native Infantry, and to join and afford Medical aid to the Left Wing of the 73d Regiment Native Infantry, until relieved by Assistant Surgeon A. Colquhoun, is confirmed.

The Dinapore Division Orders by Brigadier General W. Richards, C. B., under date

the 5th instant, directing Surgeon O. Wray, of the European Regiment, to assume Charge of the Superintending Surgeon's Office, is confirmed.

Superintending Surgeon Thomas Smith is permanently appointed to the Cawnpore Circle of Medical Superintendence.

Superintending Surgeon Thomas Tweedie is removed from the Cawnpore and appointed to the Allahabad Circle of Medical Superintendence, vice Smith.

15th.--The Eastern Frontier Orders by Brigadier H. Bowen, under date the 7th instant, directing Assistant Surgeon W. A. Green, doing duty with the 35th Native Infantry, to repair to Dacca, and join and do duty with the Detachment of the European Regiment proceeding from that Station to Dinapore, and Assistant Surgeon H. Chapman, on being relieved by Assistant Surgeon Green, to join the 55th Regiment Native Infantry, to which he stands posted, are confirmed.

21st.—The Division Order issued by Brigadier F. J. T. Johnston, Commanding the Benares Division, under date the 10th instant, approving of the appointment of Assistant Surgeon J. C. Smith to join and to afford Medical aid to the 64th Regiment Native Infantry, on its march to Saugor, is confirmed as a temporary arrangement.

The Meerut Division Order of the 7th instant, directing Assistant Surgeon F. H. Brett to proceed in Medical charge of the recovered men of His Majesty's and the Honorable Company's Service, from Landour to Cawnpore, is confirmed.

Assistant Surgeon Brett, after performing this duty, will proceed to Saugor, the destination assigned to him in General Orders of the 10th July last.

Assistant Surgeon F. C. Henderson, M. D., of the Sappers and Miners, is appointed from the 1st instant, to afford Medical aid to the Engineer Officers and Establishments employed with the Force under Brigadier General R. Stevension, C. B.

Assistant Surgeon W. A. Green, who has been directed to afford Medical aid to a Detachment of European Convalescents under orders for Dinapore, will await the arrival of the 53d Native Infantry at that Station, when he will join the Corps and assume Medical charge of the Left Wing on its separation from the Head Quarters of the Regiment.

25th.—The Cawnpore Division Order of the 11th instant, directing Surgeon B. Bell, of the 60th Regiment Native Infantry, to act as Medical Store-keeper at Cawnpore, and afford Medical aid to the Staff and Public Establishments, is confirmed as a temporary arrangement.

The appointment of Assistant Surgeon C. McKinnon, M. D., in Division Orders of the same date, from the 2d Brigade Horse Artillery, to Medical charge of the 60th Native Infantry, vice Bell, is also confirmed.

The Shajehanpore Station Order of the 1st ultimo, directing Civil Assistant Surgeon F. Fleming to afford Medical aid to the Left Wing 14th Native Infantry, on the departure for Meerut of Assistant Surgeon D. Gullan, is confirmed.

29th.—The Station Order by Lieut. Colonel H. Piper, Commanding at Berhampore, under date the 16th instant, directing Assistant Surgeon R. Phillipson, of the 72d Regiment Native Infantry, to receive charge of the Records of the Superintending Surgeon's Office, consequent on Mr. Skipton's appointment to the Medical Board, is confirmed.

The following removals and postings are made :

Surgeon J. Watson, M. D., on Furlough from the 70th to the 53d Regiment Native Infantry.

Surgeon W. E. Carte, A. B., from the 1st Local Horse to the 70th Regiment Native Infantry.

Surgeon W. S. Charters, on Furlough, from the 40th to the 71st Regiment Native Infantry.

Surgeon E. T. Harpur, (new promotion) from the Ramgurh Battalion to the 40th Regiment Native Infantry.

Surgeons Carte and Harpur will continue in charge of the corps with which they are now employed, until the arrival of the Officers who may hereafter be appointed to succeed them,

The undermentioned Officers have leave of absence :

17th Regiment Native Infantry—Surgeon I. Jackson, from 1st December to 31st December, to remain at the Presidency, on Private affairs.

67th Regiment Native Infantry—Surgeon I. Johnstone, M. D., from 8th November to 31st December, to proceed on the River, on Medical Certificate.

TO CORRESPONDENTS.

The following communications have been received since our last number :

Elephantiasis of the Arabians, a translation, by T. A. Wise, M. D.

Observations upon the supposed formation of fat in the heart, &c. by A. Campbell, M. D.

A curious case of Ulceration, by H. M. Galt, Esq.

Kirkmichael on the Glasgow Medical Professors, No. 2.

Case of Abscess of the Brain, by O. Wray, Esq.

Scotus, No. 4.

Case of Ulcer of the Stomach, by B. Wilson, Esq.

Case of luxation of the Femur, by C. Griffiths, Esq.

Observations upon Elephantiasis in reply to Mr. Raleigh, by T. A. Wise M. D. ☞ We regret that this paper reached us so late as to render it impossible to comply with the author's request to publish it in the present number.

Observations upon Bleeding in the cold stage of intermittent fever, by T. C. ☞ With regard to this paper, we must refer the author to our Editorial Observations upon anonymous contributions, at page 30 of our first number.

The case of ruptured Vein, by T. A Wise, M. D. One of Morisoniana : and observations on calculous diseases, by J. McRae, Esq. shall appear if possible in our next.

We feel greatly obliged to Col. Burney for a specimen of the long tailed turtle, called by the Burmese Then-Kyetharroowe, and for the notes and drawing accompanying it : the latter shall appear as soon as possible.

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ORIGINAL COMMUNICATIONS.

SKETCHES OF THE EDINBURGH MEDICAL PROFESSORS, NO. 4.

Dr. Alexander Munro Tertius.

Ere I go to my subject, I will say a word to Edinensis and reply in the same breath to—the query put in your editorial "What has become of Scotus?" There—he is proud to fight in the lists—by the side of Edinensis, God forbid, that he should ever meet in hostile combat a knight so redoubtable in the field he has chosen. But were he as weak as his ladye love—and I as strong as the lion hearted—the motto upon his shield—would bear him unscathed from the combat. That name has to me the most hallowed associations.

Dr. Munro in my opinion boasts of a prouder ancestry than the oldest and purest descended of the nobles of the land. The honors of the one are recorded in the blazons of heraldry, those of the other have their place in the highest niche of the temple of fame. I need not pause long to remind the Medical reader, of the honor that is due to this name. It is indeed, one of the first in the Medical History of Great Britain, and it is the patron saint of the Edinburgh School. For four generations have this family been ornaments to the medical profession of their native city.

That the subject of my present sketch does not altogether maintain the high character associated with his name, may perhaps be confessed, but let that be judged of, when we have done our endeavour to sketch his character. Galt the novelist, in that quaint phraseology for which he is distinguished, supplies me with a phrase that will go far to give an outline of the Doctor's figure. He is of a most "dislocated Anatomy." A bag of bones would not convey the meaning, for the doctor has a bag of garbage too. As the city clocks point to the mid-time between the hours of one and two, walk along the North bridge, and you will meet a figure that once seen can never be forgot, you might almost fancy, that one of the gaunt skeletons which swing to and fro in the anatomical Theatre, had like the ghost, in Hamlet, escaped from its prison house, attiring itself in the garments of a resurrection man. With shame and with surprise be it spoken, that such is the outward man, of the son and of the grandson of the Munros, and of the father of two of the prettiest maids of (Modern) Athens.

The doctor attires his Anatomy in a most *outré* manner. An old worn out beaver covers the cranium, passing down over the os frontis even to the orbits. Over the neck, trunk, and superior extremities, and terminating at opposite the middle of the tibia, there is a thick integumental envelopment of grey great coat. The natural integugument of the body thickens by exposure to pressure. The doctor's hide to his inward texture, gives ample proof of an obedience to different laws. The next you come to is a coating of black getting grey. Such is the general Anatomy of five feet six inches of this figure. What do the other 6 or 7 inches consist of? Of a well turned leg covered over with a pair of decent inexpressibles and trig Wellington boots? No such thing! some half rotten worn-out leather covers the feet skin, and an outline of muscle over the bones, tibia fibula, astragalus, &c. The cloth meant for pantaloons is stuffed into the leather meant for boots, a new way of wearing stuffed calves, one of the doctor's anatomical discoveries. I may be asked how the doctor contrives always to wear such an outward tout ensemble I speak of him in his winter covering. Perhaps like other animals he changes his coat in summer. The reader need not be told that Dr. Munro is the Lecturer on Anatomy, in the University of Edinburgh, the successor to his eminent father and to his equally distinguished grandfather. This would be a difficult position for any man to occupy if unendowed with talents of a first-rate order, and it must be confessed that the subject of this sketch, is oftener judged of, by associations connected with his name, than by a comparison with his contemporaries. I have said enough on the one head let me now turn to the other. Dr Munro, is not a popular lecturer but this is more to be attributed to want of graces in style and delivery, than to any deficiency in the knowledge of his subject. He demon-

strates the particular parts of the body with a self-possession, proving intimacy with his subject; and in simple, apposite and correct language, but with an apathy and listlessness too manifest, and too likely to withdraw the attention of his hearers. On the general doctrines of Anatomy Dr. Munro's lectures are of great value, but for the reasons above stated, they fail to afford that extent of instruction which they might do, if delivered with that grace of tone and that earnestness of manner more necessary, perhaps in lectures on Anatomy than any other. Difficile est bene communia dicere.

As a Medical Practitioner Dr. M. is of no note whatever. One would not expect that a person of his indolent habits, and independent in circumstances, would devote himself to so laborious, so toiling, so anxious an occupation as the practice of medicine And it is this indolence which has kept the third Munro from enjoying a reputation in keeping with his name. His works on the Anatomy of the Gullet and Stomach, and the Elements of Anatomy, show a mind of no common capacity; but there is about them that want of labored effort, and minute description which are so essential to real originality. His grandfather's work on the bones might have been his guide book.

In private life Dr. Munro, is respectable if not beloved. He bears the character of being sordidly fond of the circulating medium. And this puts me in mind of an anecdote told of him and the great Gregory. They were both in attendance on a sick student. At one of Gregory's visits, a fee was offered him—"No" said he. "I never take a fee from a student." "But sir," replied the student, "Dr. Munro" has accepted my fees." "Has he by g—" exclaimed Gregory with a start. Ruminating for a second or two, he desired the student to ask Dr. Munro, to meet him the next day in consultation. "Be sure," he added, to offer me a fee, while Dr. Munro is in the room." At the fixed hour the consultation took place. The student profferred Gregory the fee. "No no" said he, "keep your money, you know" (turning "to Dr. Munro with a look full of meaning) you know we never take fees from students." "Never of course" was the reply, and that night the student had his money back. I am unwilling to close with so ungracious an ending. Let me then add, that Dr. Munro is distinguished for urbanity, and gentlemanly bearing towards the students. He never fails to answer most satisfactorily any professional questions put to him after lecture, and his good humoured rogo te domine every graduate must recollect well.

Scotus.

CALCULOUS DISEASES.

To the Editors of the India Journal of Medical Science.

Gentlemen,—As you are collecting information respecting calculous diseases, and are anxious to ascertain the extent to which these complaints prevail throughout India, I beg leave to send you the accompanying case and remarks on the subject for insertion in the Medical Journal.

Calculus is a most common disease at this place, and of late I have had numerous opportunities of performing Lithotomy by the lateral operation on native boys, generally from six to fifteen years of age. A complete cure has been the result of all my operations, but the following is the only one deserving a place in your journal, the others being the usual disease, the usual operation, and attended with the usual success in such cases. The Hakeems in the city of Muttra are in the constant habit of performing lithotomy after a fashion of their own; and one of them showed me some time since, a bag of calculi which he said he had extracted in the course of practice. The natives in general in this vicinity do not appear to think very highly of their Hakeems in this operation, for they express the greatest surprize at the success which attends my operation. My patients have been all boys, and I have only met with the disease in one adult since my arrival at this place, and he would not submit to an operation. I am unable to give any hints as to the cause of the disease. My cases have all been amongst the lower classes of natives, and two of them occurred in the same family. The operation performed by the Hakeems consists in introducing two fingers into the rectum and protruding the calculus on the perinæum: the stone is then cut down upon and extracted with an instrument somewhat in the shape of a spoon.

This practice, of course, must be attended with danger and inconvenience in a large proportion of the cases that come under our notice. The vesiculæ seminales must frequently suffer during this operation, and, I believe, there are many cases in which the Hakeem must fail entirely in extracting the stone from the bladder.

Yours very truly,

James McRae,

Assistant Surgeon, Horse Artillery.

Muttra, 10th Oct., 1834.

On the 8th of July last, Gobindah, a native boy, 15 years of age, was brought to me from Bindrabun for advice, on account of a calculous affection with which he had been long afflicted, and the following history was given of his case: That he had been labour-

ing under painful and difficult micturition for the last five years, but which within the last few months had increased to extreme torture —that a tumor made its appearance about a year since in the perinæum, close under the arch of the pubis, by a calculus having escaped from the bladder into the urethra, where it has remained ever since, exciting excruciating pain and difficulty in voiding his urine—that during the last two months the calls to empty the bladder had been very frequent and urgent, and that every effort to void urine had been attended with prolapsus ani—that the prolapsed rectum gave a great deal of pain and trouble in being reduced—and that the prolapsus occurred frequently, even as often as three or four times in an hour, so as to render his life perfectly miserable—the urine came away by drops and was frequently mixed with blood. Whilst I was listening to the above relation, the boy was seized with an urgent desire to make water, and I had an opportunity of witnessing the pain to which he was daily and hourly subjected in reducing the prolapsus ani. After much straining, a few drops of urine came away, and at the same time the rectum protruded and formed a tumor at the anus as large as both hands closed, and presented a bleeding and ulcerated surface. When the spasmodic action of the bladder had subsided, the boy commenced the operation of reducing the protruded intestine, in the way he had been in the habit of doing, by pushing up one portion after another, with a piece of brick which he found lying near him, moaning and crying all the time from the pain of the operation and the spasmodic action of the bladder. He presented a picture of extreme misery, haggard and emaciated, and though 15 years of age, he did not appear to be more than eight or ten. On examination, I found a tumor in the perinæum caused by a stone, about the size of a pigeon's egg, sticking in the urethra ; a sound could not be passed beyond it, nor could the calculus be displaced in any direction : the tumor pointed chiefly on the right side of the raphé. I cut down upon the calculus and without much difficulty dissected it out from the attachments which it had formed to the urethra. The stone was of the size of a pigeon's egg, very rough and irregular and of a friable texture. To ascertain the condition of the bladder, I passed a sound through the wound in the perinæum into the bladder and there to my great surprise found several more calculi such as had just been extracted from the urethra. I now resolved on making an opening into the bladder, by extending the incision already made in the perinæum downwards, backwards, and to the right. The incision made for the removal of the stone from the urethra being on the right side of the raphé was the reason for my adopting the above line of practice instead of the usual incisions on the left side, as practised for the common lateral operation. A staff being passed into the bladder through the wound in the perinæum the external incisions were completed in the usual manner, and the bladder opened by passing a scalpel along the groove of the staff in a direction downward, backward, and to the right. At this stage of the operation some difficulty and awkwardness were experienced by being obliged to cut to the right instead of the left, and what increased the difficulty farther as the scalpel was being passed onwards, the rectum was forced down against the edge of the knife and protruded at the anus, by a violent straining effort, which could not be resisted by external pressure. This wound in the rectum caused some uneasiness at the time, but had not the slightest bad effect on the result of the case, for the boy is now quite well and voids his urine freely by the natural passage. A bullet forceps was then passed into the bladder, and several pieces of a soft, friable, greyish calculus, removed one after the other. There still remained several small pieces which could not be removed, but afterwards came away with the urine during the cure. The inner surface of the bladder felt to the finger very rough, and several pieces of the calculus appeared to be in some degree imbedded in its substance, or at least adhered to it, but I have no doubt that they were all washed out along with the urine. The boy stood the operation with great fortitude, although the frequent introduction of the forceps, and the protracted nature of the operation, caused an unusual degree of suffering. The boy was then sent to bed and had an anodyne draught given him. He recovered without a single untoward symptom and the case is interesting as it shows the facility with which wounds of the rectum heal up, and it also shows that the urethra may be laid open to a great extent without the apprehension of bad consequences in cases such as this.

Summary of the case during recovery.

July 9th, 1834.—Slept half the night and he feels easy. Pulse not affected. Urine and small pieces of gravel passing by the wound and also by the anus. Bowels not moved since the operation. Sumat Statim, Ol. Ricini, ℥iv.

10*th.*—As his bowels were not moved by the castor oil, he took four cathartic pills in the evening, which moved his bowels freely during the night. Pulse small and rather frequent, but the abdomen is soft and free from pain. Admoveantur hirudines xv regioni hypogastricæ, et foveatur abdomen aqua calida frequenter.

11*th.*—Urine chiefly passed by the rectum. Pulse natural. Thinks that he is going to die and says that he is unable to swallow any thing. He is however doing well, and I made him swallow some water in my presence. His relations look on at a distance, and have an idea that as his "hulluck is bund" he must soon die. Introduced a female catheter by the wound into the bladder, and fixed it to the pelvis by means of pieces of thread fastened to its extremity, and thus made fast to the pelvis about the anterior superior spinous process, of the ilium, with sticking plaster. I found the catheter of great service during the cure, as it allowed the wound in the rectum to heal up, by affording an easy outlet to the urine by the wound in the perinæum.

12*th.*—Gravel and urine passed partly by the rectum and partly by the wound. Pulse good. Sago and conjee for diet. Female catheter still kept in the bladder.

13*th.*—Two thirds of the urine passed by the catheter and the remaining third comes by the rectum mixed with a little blood and pus. Bowels have not been moved during the last two days, and he does not get purgative medicines for fear of disturbing the healing of the wound of the rectum. Small fragments of stone occasionably escape by the wound of the rectum and also by the wound in the perinæum. Catheter taken out to be cleaned and then replaced in the wound. Diet—sago, milk and conjee. He has not been troubled once with prolapsus ani since the operation, and he is free from pain—wound looking well.

14*th.*—All the urine passed by the catheter and the boy is in good spirits and appears to be doing well. Bowels still confined.

Capiat Pil. cathart, ad No. iij. secunda quaque hora, donec alvus plene responderit.

15*th.*—His bowels were freely moved after he had taken 12 of the cathartic pills. P. nat. Skin cool. Appetite good—wound in perinæum healing. No urine passed by the rectum—Gravel still being washed out along with the urine at the wound.

17*th.*—Catheter withdrawn as no urine passes by the rectum. Wound in perinæum doing well. Appetite good. Bowels regular. P. nat. Passes his urine without pain or difficulty.

July 28*th.*—A few drops of urine mixed with pus passed by the urethra—wound of perinæum healing rapidly and is filled with healthy granulations. Bowels kept open by a few cathartic pills occasionally. Diet—milk, sago and rice.

31*st.*—One fourth of the urine comes by the urethra and he is doing well in every respect. A few grains of gravel are occasionally passed along with the urine at the wound.

No return of prolapsus ani and he is improving in his general health and appearance.

Aug. 3*d.*—Half the urine passed by the urethra and in a pretty full stream. The wound in the perinæum cicatrized to a mere point, and the opening is now not larger than the orifice of the urethra.

16*th.*—All the urine passed in a full stream by the urethra and without pain or difficulty. Wound in perinæum completely cicatrized. The boy is in good condition, and has a happy expression of countenance.

21*st.*—The boy returned to his home completely cured, and with an expression of gratitude and happiness in his countenance, that afforded more satisfaction to his medical attendant, than the highest professional fee could.

JAMES MCRAE.
Assistant Surgeon,
3d Troop 5th Brigade, H. A.
Muttra, 10th Oct., 1834.

CASE OF FORMATION OF FAT IN THE HEART AND NEIGHBOURING BLOOD VESSELS.

The Editors of the India Journal of Medical Science.

Dear Gentlemen,—I have just read Dr. Easdaile's notice of a "Case of formation of fat in the Heart and neighbouring blood vessels" in the number of your Journal for this month. As Dr. E's pathological explanation of the phenomenon appears novel, I hope he will pardon me for communicating, a somewhat similar case, from memoranda made a few years ago at the dissection of a patient, who died in the Horse Artillery Hospital at Meerutt. The more particularly, as the circumstances attending my case were very different from those of Dr. E's, and the explanation of the diseased appearances consequently at variance with his. Truth being the object of all medical enquiries, it must be that of your Journal, but without many facts, you cannot be assisted towards the light of divine veracity. Here then is the summary of the patient's illness and appearances on dissection.

Serjeant Lennan of the 3d Brigade Horse Artillery, aged 50, and of nearly 30 years' service in India, a constant hard drinker of ardent spirits, and of loose habits, was subject for many years to attacks of inordinate action of the heart, accompanied by difficulty of breathing, and great prostration of strength. His intemperate mode of life was the sole apparent cause of the frequent attacks; for when without the means of procuring spirits, he was completely exempt

from the disease, and the functional nature of it was in consequence, with justice inferred.

The treatment on each occurrence of the palpitation, had reference solely to such symptoms, as indicated general derangement of the system, or of some other organ than the heart, torpor of the liver, dysentery, and delirium, tremens were the common terminations to " a screed o drinking ;" always however, acccompanied by the palpitation of the Heart, difficulty of breathing, and extreme weakness.

For years previous to my acquaintance with him in 1828, he had led the life above detailed, and suffered, as already stated. At length a severe attack of acute dysentery in the rainy season of 1829 proved fatal, when extensive ulceration of the large intestines and an abcess in one lobe of the liver, set at rest any questions as to the real and immediate cause of death. The heart was of the natural size and free in all its parts from organic disease, but in its cavities, the peculiarity of the case manifested itself, and the appearances being novel to me, were noted down for recollection.

On dividing the ventricles, the left one was found *nearly* filled by a yellowish fatty looking substance, semi-transparent and somewhat elastic; processes of the mass lay entangled in the muscular bands of the cavity and the arch of the aorta as well as two inches of its descending portion, with about an equal space of the arteria innominata. Left cephalic and brachial were *completely filled* by a continuation of the same substance. The right ventricle had a thin layer of a similar nature lining its cavity, shoots from which extended for about an inch into the pulmonic artery.

The name given to diseased appearances often leads to much mistake. This would have been called in the olden time " Polypus of the Heart," and would or might have been, considered a disease of long standing and in this case, the ultimate cause of death. I believe however, that the possible existence of polypi in the cavities of the heart, the same being formed during life is denied ; and verily the nature of the heart's action with the effect that such a formation would necessarily have on the preformance of its functions, being taken into consideration, common sense would incline to the truth of such a denial. I have not had pathological experience enough of any kind to warrant the drawing of a conclusion, from personal observation, but it is so adverse to possibility to allow that, the deposition of an organised substance (fat and polypi are both organised) can take place in such an agitated whirlpool as the ventricles of a living heart, and that too to the extent of completely filling them, that I pin my faith at once, to those who deny the occurrence of such formation ; and implicitly adopt the idea, that such formations are composed of coagulable (or coagulated) lymph, the same being deposited after death, or soon before it, when the living principle is so far weakened as to admit of the blood's separating into its component parts.

In this belief I think that the diseased appearance in my case, and in Dr. Easdaile's were of the same nature, and that it still remains to be settled, whether the formation was one of " fat" or merely a coagulum of fibrin, with the accidental appearance of fat.

Dr. E. says, " fibrin began to be slowly deposited, became organised, and was converted into fat." I do not recollect any thing parallel to this course in the human body, organised substances form, not in cavities smooth and in perpetual action, or where a deposit of fibrin from partially living blood is made, but where arteries alive and beating, from an unexplained living power form and deposit it.

The formations in the gall bladder and bile ducts are not organised, neither are those in the uterus, and urinary bladder.

The contents of an impregnated uterus are doubtless in some degree parallel to the formation of an organised substance in the ventricles of the heart, but not a case in point, for in the former, the directing hand of nature interferes to produce causes impenetrable, and extended throughout the entire range of viviparous creation ; in the latter a foreign growth is supposed to spring up, and proceed rapidly, amidst the contractions and dilatations of the engine, from whence is distributed the most tangible representative of the living principle.

Dr. Baillie describes this appearance nearly in the same words as Dr. Easdaile, but he is inclined to deny the possibility of an organised formation in the ventricles of the heart. He says, " It may be worth while to remark that there is sometimes found a portion of a coagulum in one of the ventricles, of a yellow colour, and with an oily appearance so as to *resemble exactly fat.* There is however no admixture of oil in it, and it possesses all the ordinary properties of coagulable lymph."

The yellow colour of these formations may according to Dr. B. arise from some bile having circulated with the blood during life, " but it takes place also when there is no reason to suppose that bile is mixed with the blood"

Dr. Garden now in Calcutta, superintended the dissection of Lennan, and may perhapes favor you with his sentiments on the

nature of the case as well as on these formations, generally.

Your most obedient servant.

A. CAMPBELL, M. D.

Nipal Residency, Dec. 10th, 1834.

CASE OF RUPTURED VEIN.

BY T. A. WISE, M. D.

Gentlemen,—In several late numbers of your Journal I have endeavoured to prove that the vitality of the Blood when increased to a certain degree, undergoes a physical change from a fluid state to a red, solid, homogeneous mass. In those Essays I have traced such effects in veins, arteries, and capillaries in which the uniform change explains some obscure points in Pathology, and must lead to a more scientific treatment of many dangerous diseases. New principles in a science, already well known, must always be received with scepticism; and before their adoption the facts stated must be proved by different individuals. In the present example its uniform occurrence, its extensive adaptation, must render the investigation less difficult, and must afford members of the profession, frequent opportunities of verifying it. As an example I beg to offer you the following case.

A syce suddenly checked a spirited young horse, which reared, and kicked him in the ham, inflicting a deep irregular wound, which bled much at the time. I saw him two hours afterwards, when the bleeding had stopped and he felt very faint. On bringing the irregular flap together I found the external saphena vein had been divided at the upper part of the wound, near its termination in the popliteal. Two inches of the vessel were separated from the neighbouring attachments, and drop after drop of blood flowed from its cut extremity. As a more considerable hemorrhage might be expected, when reaction of the system took place, I tied a ligature round it, and retained the edges of the wound together with sticking plaster; and prevented all movement of the joint, by the application of a splint.

Forty-two hours after the application, the straps were removed, in order to examine the state of the vein, and to remove the ligature, which was quickly found, and a considerable portion of the vein was still unattached to the neighbouring parts, and as there was then no fear of hemorrhage, and in order to prevent the dangerous consequence of continued irritation of the vessel, I divided the vein, beyond the part surrounded by the ligature, with a pair of scissors. The cut extremity of the vein, next the limb, formed a round circle filled up with a solid, firm, red, homogeneous portion of consolidated blood; as represented Fig. 1st. On pressing the neighbouring parts no blood flowed, as the solid blood adhered to the internal coat of the vessel.

Fig. 2.d

Fig. 1.st

The part of the vein I had cut off, I took home, and carefully dissected. A longitudinal section being made of the vein, its extremity from, *a* (fig 2) to the ligature, *b*, appeared of the natural colour, and possessed the usual properties of veins. The small portion beyond the ligature; from, *b* to *c*, was filled with consolidated blood, which was tough, and adhered intimately with the internal tissue of the vessel; the coats of which were denser, and thicker, and the neighbouring parts appeared more vascular than natural. The wound healed up without accident.

In this case, the irritation of the ligature was sufficient to consolidate the blood, which adhering intimately with the internal coat of the vessel, enabled me to remove the irritating cause without the fear of its being followed by hemorrhage. Had the ligature been allowed to remain it might have proved so severe, as to lead to suppuration, and the dangerous extension of the inflammation along the vein. The progress of the inflammation in this case affords important indications when ligatures are to be applied to veins; by proving the advantage of removing them, or, as in the present case, dividing the vessel beyond the ligature 24 or 36 hours after their application. At this time the irritation will have consolidated the blood, so as to prevent the recurrence of hemorrhage, and the irritating cause will thus be removed when no longer required, and when its continuance would be followed by an extension of the

inflammation along the vein, and thus endanger the life of the patient.

The above case proves, that after a ligature has been applied to a wounded vein, so as to act as a stimulant, and produce consolidated blood, or the adhesive stage of inflammation, its intention has been accomplished. A further continuance of the irritation of the ligature will endanger the inflammation passing to the suppurative stage, which is always dangerous when it occurs in veins. To avoid such a consequence ligatures to vein should always be applied with a slip-knot which ought to be removed at the first dressing, as no longer necessary, and liable to act unfavorably if left longer attached to the vein.

THOS. A. WISE. M. D.

Hooghly, 27th Semptember, 1834.

The preparation preserved in spirits accompanies this for your inspection.

W.

ULCER OF THE PYLORUS.

Statement of the case of J. M——. Esq.

On Wednesday the 6th of August about 7 o'clock in the Evening, I was requested to visit Mr. M. ———— as soon as possible, he having been taken seriously unwell.

Upon enquiry it appeared that he had not felt well, for several days and complained, of a peculiar sinking sensation in the stomach as if, (as he expressed it) his stomach was quite gone, and sometimes he felt as tho' a heavy weight was pressing upon it: that when walking in the verandah he was seized with a sudden severe pain accompanied with a sensation as if something had burst, or given way in or near his stomach, at which time it appears he fell down. He said he was convinced that an abcess of the liver had burst internally and that he should never survive it. He was in a cold sweat, pulse very small and feeble, countenance pale and anxious, with great restlessness, a dreadful weight at his stomach with an inclination to vomit, but unable to get any thing up, had taken a glassful of warm water to encourage it. Boiling water being at hand, hot fomentations were immediately applied to the region of the liver and stomach, and I sent off for a supply of leeches, the feeble state of his pulse, and nearly exhausted state of his system generally, precluded my taking blood from the arm: about a quarter of an hour after my arrival he vomited twice: each time about ½ a pint, of dark brown fluid as if tinged with blood, and flakes of what appeared thick matter or pus floating in it, which led me to suppose that Mr. M's opinion might be correct as to the bursting of an abscess of the liver. After this his stomach appeared more settled, and I gave him 10 grs. of calomel and a draught of camphor mixture containing 15 drops of laudanum: the leeches also arriving at this time 40 were applied to the hepatic region the seat of pain. 10 o'clock. After the leeches had been applied a short time he complained of feeling very weak and faint and as his pulse had become more feeble, I was under the necessity of removing them immediately and staying the bleeding. From this time to 12 o'clock no favorable change took place, for tho' he said he felt the pain less severe, still the anxiety and restlessness continued; requesting occassionally to have a cup of warm tea, or a glass of camphor mixture. About ½ past 12, I repeated the 10 grs of calomel and a draught with 35 drops of laudanum: after taking which he said he should like to endeavour to get a little sleep: he continued to doze and had some disturbed sleep, and about ½ past 2 o'clock he awoke and expressed a wish to sit up in bed, which he did for about 5 minutes, when he became very restless, saying he felt himself getting worse and felt assured that he should not live till day-light. As his bowels did not appear at all affected by the calomel, an ounce of castor oil was given, which he retained though he was afraid it would make him sick. He continued to doze, occasionally asking for a little warm tea, till day-break; and as the castor oil did not appear to be acting upon the bowels, I went about 5 o'clock to the hospital for an enema syringe and to prepare a purgative mixture, pills, and a blister: the mixture of Epsom salts and infusion of senna I immediately dispatched with directions for a large wine glassful to be taken every hour till the bowels were purged. During my absence he felt himself worse and directed Mr. Lang to send for me; he took a dose of the aperient medicine immediately on its arrival, and on my return he appeared in great distress that the medicine did not appear to act on his bowels, and was convinced that something serious had happened to his stomach, as his bowels were always very easily moved, he took another dose of the mixture and washed it down with some tea, he also expressed a wish occasionally to have a little soda water which he was allowed to take during the night; said that it was all useless, as what he took, he felt go down to the bottom of his belly, and it did not appear to enter his bowels: two purgative enemas were afterwards administered but without success and they were returned without bringing any thing away: from this time (9 o'clock) he became gradually worse and expressed his conviction that he was in a dying state. He refused to take any more medicine, and also some warm wine and water which was recommended and had been frequently dur-

ing the night, he being in a cold sweat and his pulse scarcely perceptible: he continued to become weaker from 9 o'clock to 11 with occasional fits of hickup with cold sweats, very restless and countenance extremely anxious. About 11 o'clock his breathing became stertorous, with frequent deep sighing and hickup, pulse scarcely perceptible at the wrist, from 12 o'clock he continued to sink very fast, becoming comatose, the eyes closed, breathing short and stertorous, and died about ¼ to 1 o'clock P. M.

BEN. WILSON,

Assistant Surgeon, 31st Regt. N. I.

Bancoorah, Aug. 12th, 1834.

POST MORTEM EXAMINATION 24 HOURS AFTER DEATH.

Abdomen in a state of great inflation and on perforating the peritoneum, a strong gust of highly offensive air was expelled. On laying open the peritoneum along the whole length, a large quantity of dark brown fluid, (say two pints) appeared diffused among the intestines, which upon being collected and examined appeared to be the contents of the stomach, with the Caster Oil floating on the surface. The stomach still continued in a state of great inflation: however on carefully drawing out the pyloric end from under the left lobe of the liver, another gust of fetid air burst out of a small orifice discovered on the outer front surface of the pylorus from which some fluid, still remaining in the Stomach continued to escape: on minute examination, the coats of the pylorus at its junction with the duodenum to the extent of about two inches were very much thickened and the passage so contracted as to be rendered nearly impervious;—the ulcer was situated just at the edge or commencement of the contraction, on the front outer surface of the pylorus. On turning up and examining the under concave surface of the left lobe of the liver, the part in contact with and resting upon the pylorus where the ulcer was situated, appeared quite livid and in a sphacelous state. The ulcer was of an oval shape with regular round thickened edges and was large enough to admit easily the little finger: on pressing the stomach, the air and a little fluid which still remained, continued to escape from the ulcer. No disease appeared to exist in any other part of the stomach. The right or large lobe of the liver was reduced in size, and much smaller than natural, the substance was of a dark blue slate color, with great congestion: there were no adhesions, through nearly the whole convex outer surface from the lower thin edge upwards, was covered with a deposition, elevated above the surface, apparently ulceration, the effect of long continued chronic inflammation; the substance of the right lobe generally, was in a state of great disease. The left lobe had a very different appearance to the right, being of a yellow or buff color on the outer convex surface, and appeared much larger than natural, the under concave surface had assumed a dark livid color and appeared in a sphacelous state. The gall bladder was nearly filled with pale yellow bile.—The Omentum, and whole surface of the peritoneum lining the abdomen in a state of high inflamation, and the vessels of the former gorged with blood, the outer peritoneal coat of the intestines in a state of general inflammation; the bowels were inflated with air, but otherwise quite empty, the lungs appeared in a perfectly healthy state.

It appeared that Mr. M had frequently complained of a peculiar sinking sensation in the stomach, from which he had suffered previous to the last fatal attack; during the last three days he felt he said as if his stomach were quite gone, and occasionally as though a heavy weight was pressing upon it. I am of opinion that inflammation had been going on for a long period of time, and that during the process, adhesion had formed between the under concave surface of the left lobe of the liver and that part of the pylorus, on which the ulcer was situated, which parts would naturally be in contact. On the night of the attack these adhesions giving way during the act of falling, or the effect of vomiting, the contents of the stomach made their escape into the abdomen, for, as he expressed it, he felt as if something had given way in his stomach; and was convinced that an abscess of the liver had burst internally, that some fatal occurrence had taken place, and that he should never survive it. He mentioned having taken occasionally blue pill over night, with a purgative the following morning, which with starvation for a day or two he said generally relieved him: he had taken no solid food during two or three days and from the appearance of the ulcer which I think had existed some time, I am of opinion that had he taken a full meal the fatal occurrence might have taken place earlier, the adhesion to the under surface of the liver having alone been the means of preventing it. From the exhausted state in which I found Mr. M. on first seeing him, in a cold sweat with scarcely any pulse at the wrist, and a countenance of extreme anxiety and restlessness with an insupportable weight and oppression at the stomach exclaiming "what can have happened? I never felt such a sensation in my life, I am sure I shall die." I was led to fear that some serious injury had occurred and the very unfavourable change which subsequently took place convinced me that nature

had suffered a fatal and irrecoverable shock and the circumstance of finding the contents of the stomach, the senna mixture and castor oil, diffused among the intestines in the abdomen, evinces that any measures adopted for the relief of the patient in the present melancholy case must have proved alike unavailling.

BEN. WILLSON.
Asst. Surgeon,31st Regt. N. I.

CASE OF MORISONIANA.

4th Dec., 3 P. M.—J. C. æt 21, an East Indian of spare habit of body and leucophlegmatic temperament says, he has been ill these several days past with fever, is now in a very low state, skin below the natural temperature, pulse 130 and scarcely to be felt at the wrist, countenance expressive of great anxiety, is very restless, tumbling and tossing from one side of the bed to the other, tongue covered with a thick brown crust and dry, says he has been much purged and that what passes scalds him very much, which he attributes to some pills he has been taking, which on enquiry I learned were Morison's. It appears this young man had been taking these pills for the last two months according to his own account, commenced taking 6 night and morning and gradually increased them to 15 and then recommenced the first number once. On the day before I saw him he had taken 6 night and morning, but now says if he should recover this illness he will never take them again, as he is convinced they are not what they are represented to be.

R. Hydr. Submur. g. xiij.
Ext. Col. C. —— g. xviij.
Pulv. Antimon. g. xxiv.
M. ft. mass. in pilulas No. xii. dividend. sumat unam 3 tis horis superbibenda Cyath. Misturæ sequentis.

R. Sodæ Carbon. ʒij
Aquæ Pur.
Mist. Camph. a a ʒviij.
Sp. Æther. Nitros. ʒiij.
A large sinapism to be applied to the stomach and belly.

8 P. M.—Is in much the same state, complains much of the smarting produced by the sinapism.—Pergat.

5.—Passed a restless night, has had 3 evacuations, scanty and very offensive, complains much of the scalding in passing them. Tongue in the same dry state, pulse more distinct and 120, no headach.

R. Ol Ricini. ʒi.
Aq. Menthæ Pip. ʒij. m.
Stat. Sum:
Rept. Pilulæ ut anteæ.

P. M.—Several evacuations from the oil, of a dark colour and very offensive, feels the same sense of burning while passing them pulse still continues quick and small, tongue the same as in the morning, is very restless countenance anxious.

R. Pil. Hydrargyri gr. v.
Pulv. Antimon. gr. vi.
Ext. Col. C. g. vi.
Opii. gr. ½
et divid in Pilul No. 2.
Hor. som. sum. et Cras Mane.
Repet. Ol. Ricini ʒi.

6th.—No sleep, has been tumbling and tossing about all night, has had 3 evacuations of the same offensive kind. Pulse 122 and fuller, tongue the same as yesterday, skin cool and dry, nausea and pain on pressure about the epigastric region.

R. Pil. Hydrargyri gr. xxxij.
Pulv. Jacobi Veri gr. xxiv.
Ext. Colocynth C. gr. xlviij.
M. et divid in Pilula No. xij.
Cap. I omni 3. tia hora.
Applr. Empl Lyttæ Scrobic Cordis.

P. M.—The blister has risen well and relieved the and nausea and pain about the stomach; in other respects much the same.

Rept. Pil et Capiat Cras Mane.
Pulv. Rhæi ʒss.
Potass Supersulph. ʒi. m.

7.—Only one evacuation from the powder taken this morning, is still very restless, skin become hot and dry; pulse 120 and full, still complains of his motions scalding him.

Rept Pilul. et mist sine Camph.

P. M.—Much the same as in the morning, had a slight rigor about 3 P. M. which lasted about 10 minutes, skin now hot and dry. Pulse 120 and full, tongue still loaded.

Pergat et Cras Mane
Rept. Pulv ut heri.

8.—Rested better last night, tongue cleaning towards the edge and moist, is altogether better to-day. Pulse 160 and tranquil with less heat in passing his motions.

Rept. Pilul et Mist.

P. M.—Had a slight attack of ague at 4 P. M. which lasted ¼ of an hour, skin now hot and dry, tongue clean and moist; indeed so much so, that I enquired if he had been cleaning his tongue.

R. Pil Hydr. gr. iv.
Ext Col. C. gr. vi.
" Hyosciami gr. iij.
M. ft. Pil ij hor. som. sum
R. Inf. Sennæ.
Mist. Camph. a. a. ʒiij
Magnes. Sulph. ʒvi
In. Sennæ C.
" Gentianæ C. a. a. ʒiss.
Ft. Mist.

Capt. dimdium Cras Mane et reptr. si opus erit.

9.—Feels much better to day, had a refreshing sleep last night, several copious evacuations from the mixture, pulse 90 and soft.

R. Quininæ Sulph. gr. xxxvi.
Aquæ Puræ. ℥xvi.
Acid Sulph Aro. ℥i.
Syrupi Aurantii ℥ii.
Ft. Mist.
Cap. Cyath omni 3 tia hora

P. M.—Has been sleeping a good deal all day, so much so, that his attendants did not wish to disturb him to take his medicine, has had no ague to-day. Tongue clean and moist. Pulse 90 snd soft.

Rep. Mist. et Crass Mane Mist. Sennæ ut antea.

10.—Passed a good night and is now doing well, but very weak.

Cont. Mist.

Allowed a little weak chicken broth.

11.—Improving, wishes to take his medicine in some other form.

R. Quininæ Sulph gr. xxx.
Ext. Gentianæ q. s. f. Pil. xij.
Cap. unam omni 3 tia hora.

12.—Rested well and now complains only of weakness ; bowels not open.

Rept. Pilul et Cras Mane Capt.
Ol Ricini ℥i.

13.—Convalescent,

Rep. Pilul et Cras Mane Cap.
Mist. Sennæ ut Antea Prescript.

14. Continues doing well.

Pergat. R.

OBSERVATIONS ON ELEPHANTIASIS IN REPLY TO MR. RALEIGH BY T. A. WISE. M. D.

To the Editor of the India Journal of Medical Science.

Gentlemen,—In the last number of your Journal a note was annexed by Mr. Raleigh to his Hospital reports, which seems to require some explanation from me relative to the means by which I obtained an opportunity of examining a leg affected with Elephantiasis, and the accurary of my description of its morbid appearances.

Some years ago a friend, knowing that I was then interested in the subject of Elephantiasis, informed me that he had procured for my inspection a leg affected with that disease, which had been removed and examined by Mr. Raleigh. I was requested by my friend, to remove a portion of the morbid structure for himself, and to do what I pleased with the remainder. A short account of the appearances, which the leg presented on inspection, was printed with my friend's consent, and with a suitable acknowledgement of his kindness. I purposely avoided mentioning Mr. Raleigh's name, and the circumstances of the case, because I dif fered in opinion with him as to the propriety of amputation in this disease ; and I shall now state the grounds on which this opinion rested. The best writers on Elephantiasis might be cited in confirmation of an opinion based on the solid foundation of reasoning, and experience. The origin and course of disease convinced them, that the inflammation which occurs, in the accession, is *symptomatic ;* and produces its local effects on those parts which from their state, or position, are most liable to such attacks. These attacks may be rendered, in the case of the weakly Hindoo who lives on a scanty supply of vegetable food, more distant, but not less dangerous, and "should make the Surgeon hesitate before he has recourse to the knife, unless under peculiar circumstances."* The learned and accurate Hendy, who had the best means of examining the disease in Barbadoes, of which he has left an admirable description, gives an account of a case in which he amputated a diseased part, which was followed by the death of the patient.† His extensive observation of the nature of the disease led him to conclude, that as it invariably attacks some other parts of the body after amputation, such operations should never be performed.‡ "Amputation of the diseased leg" says Mr. Towne "has been performed many times, but has always failed of a cure : for the distemper constantly takes possession of the remaining leg."§ M. Rayer in his excellent treatise on the diseases of the skin has arrived at the same conclusion. "Des malades fatigues parle pord enorme desparties affectees ont réclamé l'amputation comme nne derniere ressource contre un mal incurable. On assnre que ceuxd' entre eux qui ont survécu á cette operation ont été de nouveau atteints de l'éléphantiasis. qui s'est manifestésurd'autres régions du corps, on bien qu'ils n' ont pas tarde' a succomber auxsuites d' une on plusieurs phlegmasies des viseres dont ils ont étéfrappés.‖ This accurate and able writer, has related a case, in which an operation was said to have been successfully performed ; but in which the disease recurred in the arm in a much more aggravated form than before, and the life of the patient was saved with great difficulty.‖

After a careful examination of the disease in all its forms, I arrived at a similar conclusion—and although I have made a reservation, by adding that amputation ought only to be performed "under peculiar circumstances," I have never seen a case of elephantiasis, in Bengal, requiring the employment of the knife, far less one that only affected the foreleg ; although this may occur, and possibly the one under review may have been such. It is not by one case

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* Transactions of the Medical and Physical Society vol. 7, p 203.

† Hendy's Treatise p. 136—‡ and 17.

‡ Diseases in the West Indies London 1726 page 187.

§ Tome 2, seconde partie p 437. ‖ loc. cil. 438,

or by temporary relief we are to be guided, in deciding on the propriety of an operation. It is by such principles of procedure which are found on the extensive experience of different individuals- It is to such my reasoning applies. Differing as I thus did from Mr. Raleigh, and thinking that the operation did not require any peculiar degree of surgical skill, I abstained from mentioning his name, anxious to prevent the possibility of any collision between us, which it appeared to me, would be best effected by acknowledging the gentleman to whom the preparation belonged, and to whose kindness I owed the opportunity of seeing it. Nor was my determination changed on finding after I had printed the case, that Mr. Raleigh differed from me as to the appearance of the limb. I then considered that unless satisfactory reasons were given for such a change I was bound to abide by my opinion. Such reasons not being afforded; I saw no cause for altering my description taken on the spot. I requested, however, the Secretary of the Society to cancel the description of the dissection, as it passed through the press, should he think it necessary; but added that I had no reason to doubt of its accuracy. It appeared, and has been impugned: let us see with what justice.

Mr. Raleigh alleges that the putrid state of the parts might account for the differences in our descriptions; but when I examined them they were fresh enough for every purpose I had in view, owing to the cold dry weather, and the attention that had been bestowed in placing the leg in a good situation

The first objection Mr. Raleigh makes to my account is the employment of the word, "Tumour." Any person, who has examined the disease as seen in the streets of Calcutta, will find, that in the weak Hindoo, morbid parts increase irregularly by repeated attacks, according to the quantity of the cellular tissue, the position of the part, and the resistance the enlargement meets with; from the unyielding structure of fasciæ, or by the movements of joints. The leg was in this state, and although the whole subcutaneous cellular tissue was swelled, some parts were more so than others. This appearance was described by me in the following words; the limb was much swelled and deformed, and the foot distended with a large tumour extending immediately above the ankle joint.* Mr. Raleigh's description is as follows; "from the integuments admitting of less distention immediately round the ankle, a sulcus was occasioned between the enormously swollen leg, and dorsum of the foot.† It was one of these enormous swellings I called a tumour, and I consider it hypercritical to deny the correctness of the term so applied. Philologically considered the application of the term tumour to a large abrupt protuberance is assuredly as correct as its diminutive tubercle—the one as in the term hernial tumour, uterenitumour &c. the other as expressing the small elevations that sometimes appear on the face &c.

There is an appearance of plausibility in Mr. Raleigh's account of the muscles of the leg, which he says were of a "very dark colour"—(does this mean dark red colour?) and much wasted and soft, as is common after a long state of inactivity." I have no doubt the patient stated it so, as Mr. Raleigh alleges that the acute stage, and "copious drain from the sores continued constant during the previous six months;" but, as this is altogether at variance with the records of medicine, as to the course of the disease in this country, I suspect the correctness of the patient's statement. The operator, however, assuming, or not doubting the truth and accuracy of the native's statement, concluded; that from the "state of inactivity in this instance they (the muscles) also appeared flattened from the degree of *compression* they had probably been subject to, by swelling of the encircling integuments:" that is, the swelling of the encircling integuments compressed the muscles into a flattened form. It is, however, I believe a received dogma in Physiology, as well as in Pathology, that the covering of organs, both in their growth and in their diseased state, neither compresses them nor gives them form; and that the only exception to this law is in very rare cases of the compression of veins, and in a few very acute malignant swellings, which involve, by extension of the disease, rather than compression, the organs they surround. But Eleplantiasis does not come within the exception in asmuch as the swelling, in this country, is formed by repeated invasions, which allow abundance of time for the muscles to recover any tendency to compression, which might occur during the acute stage of the disease. And in its most aggravated forms, the person may be seen, during the intermissions, following the most laborious occupations. The muscles are thus allowed to recover their form, and from the additional weight they carry, the muscular strength of the part affected is increased.* To this view, I have only to add that the muscles, in the case in question, were, to the best of my judgment, exactly as I have stated; and I do not think it will be considered improbable that, in such a diseased structure as the foregoing, the arteries and vein were somewhat changed, as I stated having found them.

* Trans: p. 191. † Med. Journal p. 453.

* See Towne's Treatise on West India diseases p. 187.

I am likewise obliged to differ from Mr. Raleigh in his remarks regarding the Lymphatics, which I said "were empty and appeared healthy, but their glands were somewhat enlarged, hard, and red." Does Mr Raleigh insinuate, by placing this passage opposite his own remarks, in which he states that although he examined the parts for "several hours he could distinguish none" —that there were none, or that they were not discoverable? Do I say in my description that they were conspicuous since "he concludes they could not be very conspicuous?" I can only say it proves the fact that after Mr. Raleigh's examination I had scope for my dissection; and that I exposed, without difficulty, several glands in the ham as I described them. It is somewhat strange that the state of the Lymphatics was not examined in a dissection such as Mr. Raleigh instituted, when it is remembered that the state of these vessels, still divides the opinion of Pathologists, on their degree of participation in this disease I might contrast his silence regarding the Lymphatics with the correct account I gave of these vessels and glands, which it is not likely I would have done without a careful examination—militating as it may be supposed to do against my own opinion regarding the nature of the disease.

I will only repeat that I had the authority of the Gentleman, to whom the morbid preparation belonged, for describing it; and that I noted at the time the appearances I observed with care and circumspection. With the above remarks on the reasons which induced me not to mention Mr. Raleigh's name in connection with the few remarks I made on the morbid preparations, when it belonged to another; and, on the difference in our descriptions of the morbid appearances and in our opinions as to the treatment of the disease I leave the matter to the decision of my Brethren, in the profession, on those sound pathological principles, which are generally acknowledged. Regretting only the necessity of writing at such length in vindication of myself.

I am, Gentlemen,
Your humble Servant,
T. A. Wise M. D.

HOSPITAL REPORTS.

SUMMARY BY MR. RALEIGH, FOR THE MONTHS OF NOVEMBER AND DECEMBER, 1834.

The new moon, which presented itself on the first of November, was accompanied by a decided change of the monsoon; the wind, variable during the preceding week or ten days, now set steadily from the north, and the dense masses of cloud, which for the previous four months had obscured the heavens, were dispelled with such extraordinary rapidity, that within the ensuing twenty four hours, the sky had assumed that uninterrupted and beautifully clear blue aspect, characteristic of the oriental cold, and dry seasons. From this period the rains ceased, and the atmosphere became cool, dry, and bracing. All nature seemed to participate in the salubrity of the change. The European constitution, rallying from the state of ennui into which it had lapsed through the hotter months, again felt desire to resume the more natural, and exhilarating occupations, and amusements; and the spirits, sympathising with the physical energies; festivity, and merriment commenced, and up to the present period, has alone been interrupted in Calcutta, by the departure from its society, of one of its most distinguished, and most generous promoters.

The nature of the climate during November and December, has been very similar. The average range of the Thermometer, may be stated at from 70 to 76, although it has at times been several degrees higher, or lower, and consequently occasional sultry, or very cool days have intervened.

The diseases proper to the season, have been generally speaking, of a mild and tractable description, and of such common place characters, as to render their detail, of little interest and plead excuse for the insipidity of my report. The General Hospital, however, has been rather unusually crowded, in consequence of the admittance of a large number of the newly imported recruits, and sailors belonging to the shipping, which during these months crowd the port of Calcutta, together with the annual detachment of invalids; of all of which classes of individuals, a great number were paying the penalty of imprudence.

Colic. Among the most troublesome cases of disease prevalent during the month of November, I may class common spasmodic colic—(in my present observations, I shall of course be understood to refer only, to colic as it commonly presents, and not to those more complicated affections, the result of organic disease, mechanical obstruction &c. and of which complaint in its severe form, several instances were admitted into hospital. The subjects were for the most part sailors, and as almost all of them were sent from the same ship, it is natural to conclude, that there may have been something impure about the vessels in which the food or drinkables of the crew were kept: this inference is somewhat strengthened by the circumstance of a few of these individuals, who had been discharged the hospital, perfectly cured of the complaint, being re-attacked shortly after their return to their ship. The causes of this disease, are numerously laid down by

authors, their effect being considered as directed on the muscular coat of the large intestines; but of the exact exercise of these agents, difference of opinion prevails. The symptoms of colic being considered by some, as the result of irritation of the muscular structure, whilst by others they are attributed to a loss of muscular power in certain portions of the gut, and consequent irregular peristaltic motion, but whatever may be the cause, most writers agree in the supposition, that in this complaint, obstruction is offered to the passage of the contents of the alimentary canal, and that to this interruption of the processes of nature, in expelling the contents of the intestines, is to be assigned all the symptoms of the disease; which may be briefly stated as, spasmodic pain of the bowels, coming on at intervals, in the early stage, relieved, rather than increased by pressure: obstinate costiveness, occasional vomiting; with no attendant febrile symptoms, at the commencement. Now that this is the definition of colic as it very generally occurs, I am ready to admit; but the observance of many cases, and personal experience, has taught me, that *obstruction* is by no means the invariable immediate cause of the symptoms of colic, and that the disease depends occasionally, on a circumstance to which I recollect no allusion being made, by those who have written on the subject, whilst the phenomena of the disease, when occurring from the cause which I am about to mention differs, in some respects, from those ordinarily considered as characteristic of the complaint. I shall therefore premise the cases I am about to detail, by a few remarks on the description of colic, to which I have called attention.

The direct cause of the particular form of colic to which I allude, would appear to be, *checked Hepatic secretion*, generally the the result of cold, the affection may be considered as most frequent in the cold season, but is not at all uncommon in the hot winds, at which period, persons when in a heated state, are very apt to expose themselves to strong currents of air, and to sleep in situations unprotected from the changes of temperature incessanly taking place at this season, from the alternate strong breeze, and lulling of the wind.*

The complaint generally makes its approach about two or three o'clock in the morning by a peculiar sensation of nervousness and restlessness, accompanied by a rumbling of the bowels, and slight griping, this is soon followed by nausea, vomiting, and a desire to go to stool, which is attended by tenesmus, the tormina continue, and the calls to stool become more frequent, generally amounting to two or three of moderately thick consistence, and of fœcal matter. Succeeded by four or five other *watery* evacuations, devoid of bilious secretion, of pale colour, or dirty brown hue.

The pains now assume, the decided coli character, and become agonizingly violent each paroxysm lasting about five minutes, and the intermissions being only of ten or fifteen minutes' duration. The pulse immediately after the fit of pain, is fluttering, but soon subsides to natural standard, during each attack of spasm, the patient seeks relief, by bending the trunk towards the thighs, and pressing firmly, bottles of hot water, or a pillow, to the abdomen, he generally has recourse to some warm stimulants, and then to opium, but either, only afford temporary relief, and the latter tends to counteract the desired object; efficient means not being resorted to with celerity, the diaphragm, other muscles of respiration, and of the back also, occasionally become affected with severe spasm, but this is not commonly the case—the spasms of the colon (principally experienced at the transverse portion), continuing, the patient wearied out with pain, becomes exceedingly nervous, and faint, the pulse quickens, and the skin, which at the time of the attacks of pain, is suffused with perspiration, at the intervals is hot and dry, and the tongue coated.

The appearance of the evacuations, is the best guide to the treatment, in this case, it is evident, that *obstruction* of the contents of the alimentary canal is *not* the disease, but that the symptoms are, in my opinion, caused by a suppression of the natural stimulus of the bowels, and until the secretion of the liver, (and probably of the mucous surface of the bowels also) be established, the irregular peristaltic action will continue unabated. With this view of the disease, calomel will be resorted to, and I have no hesitation in saying its effects are most satisfactory: about half an hour after it has been swallowed, the patient experiences, some relief of the sense of heaviness at the precordia, he before suffered, and the severity of the spasm abates; the method of treatment, in cases where abstraction of blood may not be a necessary precursor, consists in the administration of xij or xv. grains of calomel, with ij grains of ipec: if the stomach be not irritable; should the symptoms be somewhat relieved by this first dose, castor oil alone, or with Turpentine is given, after four Hours; but should the spasms remain severe, the calomel and ipecacuanha is repeated, before the purgative is

* This change of temperature of the body, is occasioned more by the person placing himself within the influence of the wind, or otherwise, when in a heated state, than from any alteration of atmospherical temperature.

given, in order to admit of the mercury acting on the liver previous to being carried off-generally speaking one or two doses of calomel followed by the purgative will have the effect of exciting the liver to action, the stools at first pale, or leaden colour, become more bilious, and as they assume this character the spasms cease. It will be necessary to keep up the once established biliary flow, by a smaller dose of calomel, perhaps combined with extract of Colocynth, and followed up by a purgative, and the cure will usually be completed, by persisting for two or three further successive nights, in the use of blue pill, and colocynth; the application of a mustard sinapism over the upper part of the abdomen, has appeared to be attended with benefit during the acute stage.

Of the morbid appearances of colic after death, I can from personal observation state nothing, as I have never had a case that proved fatal.

Case of colic, from arrested secretion of the liver.

Nov. 20th A. M. W. B. æt; 28 a stout man, was attacked in the night with griping, and uneasiness of the bowels, and desire to go to stool soon followed by too rather thick fæcal evacuations and four or five watery ones, of pale brown colour, attended by severe spasms across the upper belly, and excessive state of nervous excitement, which induced him to fancy he had an attack of cholera; a dose of laudanum was taken, which for a time soothed the pain, but it soon returned with equal violence, and at the time I saw him, 7 o'clock A. M. the spasms were so acute as to occasion him to bend his body on the lower extremities and roll about the bed, and floor. These paroxysms of pain, continued for about three or four minutes, and were succeeded by an interval of ease, during which the patient was left in a trembling, and weakened state, from which he had scarcely time to recover a little, before another fit of spasm ensued. The pulse was soft, moderate in size, and about 90 in a minute; the abdomen felt sore, but had not the tenderness of inflammation, the tongue was white, and the mouth dry, and clammy.

R. Calomel gr. xv.

Ipecac. gr. ij. directly.

Mustard sinapism over the upper belly.

11 o'clock. The paroxysms of pain have been less severe, and not so frequent, as before taking the medicine, but still continue in slighter degree, he has had two pale fluid stools.

R. Calomel gr. xij.

Ipecac. gr. ij now.

3 o'clock P. M.—Is almost free from spasms, Has passed two fluid dark stools evidently coloured by the calomel.

Ol. Ricini ℥j immediately.

7 P. M.—The oil has acted several times, the first stools of a leaden coloured fluid, the latter of more green appearance—no return of colicky pain.

R. Calomel gr. vi.

Ext. Col. Comp. gr. vi

Ipecac. pulv. gr. i. Hor som. sumend.

21st A M.—Quite free from spasm, the abdomen is tender on pressure, and somewhat distended. Passed three stools of greenish brown colour, in the night.

Rept. Ol. Ricini, ℥;

P. M.—The oil operated five or six times, he now only feels weak, and exhausted.

R. Pil Hyd. gr. v.

Ext. Col. Comp. gr. v.

Pulv. antim, gr. iij. Hor som, sumend.

22.—No complaint—the pills of last night, were repeated for two more successive evenings, and for this period his diet consisted of sago, and chicken broth.

Case II.—*Colic, with alimentary obstruction.*

J. A. Æt. 29, 4th Nov. P. M.—States, that for three days past, he has been suffering violent pain across the upper belly, of spasmodic nature, bowels costive during the whole of that time, with excessive irritability of stomach, no febrile symptoms, but the pulse full, and face flushed.

V. S. ad deliq.

R. Calomel ℈i.

R. Ol. Terebinth ℥ij. Conjee, lb.iss as an injection immediately.

Ol. Terebinth.

Ol. Ricini aa ℥i. to be given six hours after the calomel.

5th.—The bowels acted on several times, spasm relieved, complains only of soreness of the belly.

R. Ol. Ricini ℥j.

Ol. Terebinth, ℥ss. directly.

P. M.—He experiences occasional colicky pains, bowels freely purged.

R. Calomel gr. xx.

G. opii gr. i. Hor som. sumend.

6th. Free from any spasm of the intestines, bowels not acted on in the night.

R. Ol. Ricini ℥i.

7th.—No complaint—bowels moderately acted on, and stools natural.

8th.—Bowels not open.

R. Ol. Ricini, ℥i.

9th.—Quite well.

Case 3d. Nov. 10th A. M. A. K. Æt. 24. Colic, with obstinate costiveness, No pyrexia.

R. calomel. et ext. col. comp. aa. gr. x.

Stat sumend.
R. Ol. Ricini.
Ol. Terebinth aa ℥j. in four hours after the pills.
Enem. Purg. immediately.

P. M.—He rejected the oils, by vomiting, bowels have not been acted on, and the symptoms of colic continue unabated.

R. Calomel gr. xv.
Ol. Croton gr ij.
Ext. Col. Comp. gr. x. immediately, and let the following injection be administered.
Ext. Col. Comp. ℥j.
Congee lb.iss ft. Enem.

11 P. M.—The stomach retained the medicine, the spasms are not so severe, but the bowels have not been affected.

Rep. the Cal. Col. and croton. Pills now
Ol. Terebinth.
R. Ol. Ricini aa ℥j. in four Hours.

P. M.—No stool.

Rept. injection and Pills H. S.

12th.—The bowels continue obstinately costive, and he suffers pain acros the upper belly at times, but has no fever.

R. Calomel gr. vj
Ol.. Croton gr. ij.
Ext. Col. Comp gr. x.
every four hours, until purged.
Rept Enem. Purg.

11th.—Has taken three doses of pills, the bowels now freely evacuated.

13th.—Free from spasm, but complains of griping.

R. Ol Ricini ℥j. stat. sumend.

P. M.—Somewhat griped.

R. Pil Hydrarg gr. x
Ipecac gr. ij.
G opii gr. j Hor. som. sumend.

14th.—Perfectly relieved of pain, no stool in the night.

Ol Ricini ℥j.

15.—A little blue pill, colocynth, and ipecacuanha, were given every night, for two or three nights, and on the 23d a dose of castor oil. Discharged on the 30th, cured.

Nov. 16th J. J.—From the same ship as the two preceding cases, had been a patient in the General Hospital for a severe attack of colic, of which complaint he had been cured, and was returned to his vessel about a week since, two days previous to this readmission, he states the pain across the upper belly to have returned, and that he has had no evacuation from the bowels, for the same period, the symptoms are not so acute as before, and he has no fever.

Inject. Purg.
Calomel gr. xv. immediately.
Ol. Ricini.
Ol. Terebinth aa ℥i. in four hours after the calomel.

P. M.—Symptoms unrelieved.

Rept. Inject.
R. Calomel &. Ext. Col. C. aa gr. x. H. S

17th.—There is some tenderness across the upper belly, with occasional spasm, the pulse small, soft, and slow, stomach disposed to be irritable, no pyrexia.

xxiv. Leeches across the upper belly.
R. Calomel
Ext. Colocynth C. aa gr. x.
G. opii. gr. ss. every three hours, until purged.
Ext. Col. Comp. ℥i.
Conjee, lb.iss as an inject. directly and again at noon if not freely purged by that time.

P. M.—No evacuation from the bowels.

Pills continued, and Inject. ———

18th.—Colicky pain across the upperbelly continues to recur, the bowels have not been efficiently operated on,

Blister across the upper part of abdomen.
R. Calomel gr. x. stat. sumend.
R. Ol. T erebinth ℥ij.
Conjee lb.iss as an injection immediately.
R. Ol. Terebinth ℥ss.
Ol. Ricini ℥j. three hours after the calomel.

P. M.—Six free stools, still some uneasiness at the transverse colon.

Calomel ℈i. hor. som sumend.

19th.—Several stools in the night, belly quite free from pain.

R. Ol. Ricinii ℥i.

From this period he was convalescent.

CASE OF ABSCESS OF THE LIVER. (*Abridged.*)

Mr. H. D. Æt 18 years, of fair complexion, an officer of an Indiaman, who had on a previous voyage been the subject of a severe attack of Dysentery, was admitted into Hospital on the 3d of November, labouring under the symptoms of Hepatitis, the account he gave of himself was, that he had been ill a week on board ship, during which period he had been three times bled from the arm, but on neither occasion to syncope, and that he had taken medicine which had purged him freely.

At the time he was brought to the Hospital 5 o'clock P. M. he complained of very severe pain at the hypochondrium, chest, and shoulder, preventing a deep inspiration, or of his lying in the horizontal position, his countenance was anxious, and respiration hurried, pulse quick, small, and hard in the stroke, tongue white, and skin warm, and dry.

Bleeding to Syncope, and.
xij. Leeches over the right side.
R. Calomel gr. x.
Antim Tart gr. ss. directly and at nine o'clock at night.

4th.—The pain somewhat relieved, but still severe, in the lying position he is confined to

his back. Pulse small and frequent, he feels faint, has passed four stools during the night.

R. Calomel gr. v.
Antim Tart gr. ss. every four hours.
Spoon diet and barley water.

P. M.—Side continues painful, he is not so faint as in the morning.

viij. Leeches to the side.

5th.—Pain of the side much diminished, pulse small and slower, bowels freely acted on.

vi. Leeches to side. Cont. med.

P. M.—Suffering an increase of pain this evening.

xij. Leeches over the side.
Med. continued through the night.

6th.—The side much relieved, has had no evacuation from the bowels during the night.

xii. Leeches
Pulv. Jalapæ Comp ʒi. now.
Cont. Med.

P. M.—Two stools, side easier, pulse small but he does not feel faint.

iv. Leeches.

7th.—This morning he is so free from pain, that he can lie on either side, he has passed three stools in the night, the pulse is small and feeble, and he is very low.

Blister over the right side.
Cont. Med. *Sago 2 cups.*

P. M.—He is very faint, and worn out from not having slept for several nights, side easy.

R. Calomel gr. viij.
Opii. gr. j. at bed time.

8th.—Had a very tranquil night, one stool, he has this morning a hectic countenance, the skin is suffused with pespiration, the pulse small, no ptyalism has yet been effected, but he complains of a sense of heat of his gums and throat, has desire for chicken broth.

R. Quininæ S. gr. ij.
Pil Hydrag. gr. v. four times in the day. *A cup of chicken broth at* 11 A. M. *Lemonade.*

P. M.—No stool during the day: he is less faint.

R. Calomel.
Ext. Col. Comp. aa gr. v. hor. som. sumend.

9th.—He has passed a very indifferent night, the pills acted five times, stools of natural appearance; this morning he complains of an increase of pain at the side, some uneasiness in breathing. Pulse small, soft, and 90 in a minute.

Reapply a blister on the side, above the former one.
Cont. Med.

P. M.—Side more easy, P. soft, 90—several stools in the day.

R. Pil. Hyd. gr. vi.
Pulv. Antim. gr. iij.
G. Opii. gr. j. hor. som. sumend.

10th.—Slept well, is this morning free from pain, and breathes naturally, two stools in the course of the night, his countenance continues unfavourable, and skin is very moist.

Cont. Blue Pil and Quinine, four times a day.

P. M.—Composed, three stools in the day.

Rept. the night Pills.

11th.—He slept well, perspired profusely through the night; this morning his pulse is soft, and regular, about 90 in a minute, he suffers uneasiness at the right side, and does not breathe comfortably, bowels not moved since yesterday.

R. Ol. Ricini ʒj. immediately.
Cont. the day pills, at noon, and 4 o'clock P. M.

P. M.—Three stools, feels better.

Rept. the night pills.

12—Feels better, bowels not open.

R. P. Jalap, Comp. ʒi. directly.
Other Medicine continued.

13th.—Passed a very good night, but this morning his breathing is more oppressed, he experiences uneasineas at the side, and can only lie on his back, pulse small, 90 in a minute, no evacuation from the bowels.

Rept. Pulv. Purg.
Reapply a blister over the right side.
Rept. night pills.

14.—The blister relieved his side, and during this and the succeeding day, he appeared more cheerful, and better.

16th.—Slept well and had three natural stools in the night, but this morning his skin is suffused with perspiratiou, his pulse is soft feeble, and frequent, the right side of the thorax appears raised higher than the left, but there is no perceptible fulness below the cartilages of the ribs, he is perfectly easy whilst lying on his back, but motion of the body, or the slightest pressure over the side, occasions pain, no ptyalism has been produced.

R. Quininæ Sulph. gr. ij.
Pil Hydrag gr iv.
G. Opii. gr. ¼th, four times in the day.
Rept. the night pills. *Continue his former diet, beer lb. j.*

17—Much the same as yesterday.

Remedies continued.

19.—During yesterday and last night his bowels have been rather relaxed; his pulse is small and frequent, and his skin usually very moist—he is exceedingly feeble.

R. Quinin. S. gr. ij.
Opii. gr. ss.
Ext. Cinchon. gr. iij
Ter die. *Port wine, meas. ij. Omitting the beer.*
Night pills repeated.

20th —He has become very much exhausted during the last twelve hours, his countenance pale, and features shrivelled, pulse thready, and rapid, skin very moist and clammy, stools rather frequent, and consisting merely of the secretion from the surface of the intestines, as evening approached much restlessness and anxiety prevailed which was ameliorated by an anodyne, and he seemed to pass quietly from sleep into death, during the early part of the night.

Post Mortem Examination.

The elevation of the right side of the thorax, alluded to in the detail of the case, continued very apparent after death, but there was very little unnatural fulness below the cartilages of the ribs; on exposing the liver, the right lobe of that viscus was observed to have much enlarged, and to have extended itself more towards the thorax, by pressing up the diaphragm, and elevating the ribs than, as is commonly the case, into the abdomen. A small quantity of coagulable lymph had been effused, on the surface of the peritoreal covering of the upper part of the right lobe, but no adhesion had been established between it, and that, lining the parietes of the abdomen, excepting at its lower margin, where the structure of the liver was unaltered, the right lobe was converted into a mere bag, containing five pints of greenish yellow pus, with some curd-like lumps, and the thin walls which the undestroyed portion of the liver constituted, presented towards the abscess, an irregular surface, in a state of suppuration. No other morbid appearances were recognized.

Case of Inflammation of the internal, and external tunics of the Eye.

Mr. T.—Æt 19.—Officer of a ship, had lately been discharged from the hospital cured of an attack of conjunctival inflammation, and was now on the 3d of November readmitted, in consequence of his suffering a relapse in the right eye. He complained of considerable pain, and sense of weight in the ball of the eye, pain of the forehead and right side of the head, much intolerance of light, and stillicidium. The conjunctiva was but slightly reddened but just posterior to the junction of the schlerotic coat, and the cornea, was a well defined red circle, the iris in its natural state of hazel, was now of a red brown color, and its margin much puckered, the aqueous humour somewhat turbid; his tongue was white, and pulse rather frequent, his bowels had been freely purged by medicine.

Bleeding to faintness.
Belladonna applied round the eye,
R. Calomel gr. v.
Antim. Tart. gr. ss. now and repeat in four hours. *Spoon Diet.*

P. M.—Pain of eye lessened.
viij. Leeches near the eye.
Rept. the Calomel and antimony at 4 and 9 o'clock.

4th.—The eye still much inflamed—bowels open.
Repeat Bleeding.
R. Calomel gr. v.
Antim Tart gr. ss.
Ext. Colocynth Comp. gr. iij. every four hours.

P. M.—xvi. Leeches to the vicinity of the eye, and fomentations.

5th.—The eye continues considerably inflamed, pain of the globe and side of the head severe, and the iris puckered and reddish, the gums becoming affected. Bowels not open freely.
xvi Leeches to the temple.
R. Pulv. Jalapæ Comp. ʒi. now.
R. Magnes. Sulph. ʒij.
Antim Tart gr. ss.
Aquæ ʒij. every two hours.

P. M.—Medicine acted three or four times, eye less painful.
xij. Leeches to the temple.
Contr. Mistur.

8th.—Improving.
xvi. Leeches.
Contr. Mistur, every two hours.
Foment the eye.

P. M.—Ptyalism copious, eye much less painful.
iv. leeches and gargle

7th.—The red areola has nearly disappeared, and the pain of the head has much decreased. Bowels not open.
xij. Leeches.
Pulv. Jalap Comp. ʒj.
Contr- Solut.

8th.—The eye much better, and bowels freely open, has had no sleep for many nights, pulse small and irritable.
iv. leeches to the temple.
Pil Hydrg. gr. vi.
Opii. gr. i. hor som. sumend.

9th.—Slept well, and is much better.
Pulv. Purg.
Rept. Pil H. S.
iv. leeches to the temple.

10th.—The margin of the iris is now free from irregularity, the red ring round the globe of the eye has disappeared, and pain has entirely left him.

Spoon diet, sago three cups.

From this time a daily purgative, the very cautious and gradual exposure of the eye to light, and a mild diet, were alone required to complete the cure. Discharged well on the 17th.

Case of Spontaneous Dislocation of the Crystalline Lens.

Dec. 18th.—P. A.—A stout sailor, Æt. about 40.—was placed under my charge in order to undergo an operation for the removal of a cataract, his own history of his case was, that four or five months since he experienced an attack of redness and pain of this, the left eye, which after a few days duration left him, from that period his vision had become gradually more and more imperfect, and that during the last two months he had not been able to distinguish any object, he did not remember having received any blow, either on the eye, or head. Observing the lens to be opaque, and the pupil contracted, I directed the application of belladonna; on the following morning, when proceeding to examine the condition of the cataract, I was surprized to find that the lens had come through the dilated pupil, and now occupied the anterior chamber, and as its appearance indicated that its circumference was undergoing solution, I allowed it to remain; after about a fortnight, during which time the lens frequently passed from one chamber to the other, it was evident that very considerable decrease in its size had taken place, and as no ill effects were produced on the organ from its present unnatural position, as the man was beginning to distinguish objects, when the lens happened to be in a situation of admit of rays of light passing over its edge, and as the patient's health was robust, I recommended him to allow nature to effect a cure for herself, or at any rate to give her a fair opportunity of doing so,—and discharged him to rejoin his ship, which was on the point of sailing for England.

Case of Abscess of the thigh.

Nov. 30th. L. G—Æt about 22— an Indo-Briton—stated that he had been for two months laid up with fever accompanied by inflammation of his left thigh, his appearance was cadaverous, he was much emaciated, had a hot dry skin, small frequent pulse, and white tongue, the left thigh was exquisitely tender and somewhat swoln, on examination a sense of fluctuation, as of fluid deeply seated was experienced. I immediately made a free incision on the inner and back part of the thigh through the great adductor muscle, when the scalpel had passed nearly the whole length of the blade in depth, a gush of greenish fœtid pus to the quantity of half a pint took place, and afforded almost instantaneous relief, the whole limb was bandaged, leaving the wound open, a poultice applied over the whole thigh, and an anodyne administered at bed time.

1st—Slept well—discharge of fœtid pus, copious.

Haust Purg.

Nov. 1st.—Free from fever. Bowels open—from this period, tonics with an occasional laxative were administered, and a mild diet allowed, he was cured by the 10th of the month.

I will now proceed to a brief description of two cases which were noticed in former numbers of the journal, and a detail of which I stated should appear as soon as their result was known.

Case of Fractured lower extremities.

Aug 23d.—at 3 P. M.—Mr. C—a stout man æt about 35, received an oblique fracture of the left femur three inches above the knee, the extremity of the upper part of the shaft of the bone penetrated the integuments on the inner and lower part of the thigh, causing a wound of one and half inch in length; the inferior portion of the femur was partially bent on the leg, by action of the gastrocnemius, &c. And its ragged ends consequently opposed to the muscles on the back of the limb, occasioning much pain. Retraction of the limb to the extent of four inches took place.

The tibia and fibula of the right leg, were fractured just above the ankle joints, and the bones could be felt to be splintered into several small portions. the lower extremity of the shaft of the tibia, was so much directed inward, as nearly to penetrate, and to occasion its ragged edge to be marked by a discoloured line on the skin. The soft structures of both extremities were much contused, and various parts of the body had suffered severe bruising.

The patient was placed on Mr. Amesbury's fracture bed, the thigh place of which, being adjusted to the sound thigh, the fractured one was extended over it, to its natural length, and fixed in that position, the wound being dressed with lint, &c.

A couple of side splints were loosely applied to the fractured leg, and cold lotion. &c. had recourse to.

25th.—Through yesterday, and the night, continued free from pain. The Bowels had not been acted on since the accident.

P. jalap Comp. 3j was administered.

26th. The medicine produced one copious stool, the fractured thigh was retained in excellent position, but the right leg had an unfavourable appearance at the seat of injury, the tibia threatened protrusion through the skin, which surrounding the ancle was of very purple hue, and covered with large vesicles; no alarming constitutional symptoms prevailed, the skin was cool. Pulse 90, small and soft.

Sept. 1st.—Up to this time he had gone on tolerably favourably, but now inflammation had become more acute about the right ancle, and the pain was this evening severe.

Leeches, cold Lotion, & Purgative.

4th.—Through the 2d. and 3d. the pain at the ankle continued severe, the tibia had occasioned ulceration of the integument, and suppuration had evidently taken place about the seat of injury, and urgent constitutional derangement existed.

Amputated the limb below the knee.

5th.—He was very restless and irritable at evening, but an opiate procured him a good night.

6th. During the morning he appeared better, a purgative acted three times without occasoning disturbance of the limbs; at evening he was very restless, complained of pain at the stump, the dressing of which was consequently loosened; as night approached the pain of the stump was insupportable, he became ungovernable and tore off all the dressings, the discharge from the stump was thin, but the surface of it looked well. Pulse small and rapid.

A Linseed meal poultice, into which Tinct opii ℥ss was mixed, was applied over the stump.

R. Tinct opii ℥iss. ft. haust; anod.

7th.—He slept through the night, the stump was much less painful.

10th.—Through the 8th and 9th the same application to the stump, and the night anodyne were had recourse to, and afforded comparative ease, and composure, he passed the last night quietly, and continued on this day tolerably easy, the stump presented a healthy granulating surface.

Mild Purgative.

30th.—Up to this time nothing worthy of recital occurred, the stump healed gradually by the granulating process; as union of the left femur had been established, the patient was now placed on his side, to relieve pressure on some ulceration which had taken place on the sacrum, as the consequence of confinement to the same position; and as he was much reduced, tonics and a nourishing diet were allowed; with occasional laxatives, &c. which restored his general health.

On examination of the amputated leg, the tibia and fibula were ascertained to be fractured into several small portions, immediately above the ankle, but the joint itself was not implicated in the injury.

Case of Wound of the Hand.

Mr.—J.—D.—Æt 27, a delicately made man, of Indo British birth, was admitted the General Hospital on the 15th of October, under the following circumstances: by the explosion of a gun at the time his hand was held over the muzzle, the fore and second fingers were blown off at their junction with the metacarpal bones, the cartiloginous extremities of which were lacerated, and exposed, the third finger was deprived of great part of the integuments on the thumb side, and the joint between the first phalanx and metacarpal bone was laid open, the soft parts on the palm of the hand were so much destroyed as to expose the metacarpal bones of the three first fingers down to a line with the ball of the thumb; the accident had happened eight days previous to his coming to Hospital, during which period, he had been employing styptics for the purpose of checking hemorrhage which frequently took place, and had had his wound very unscientifically treated. At the time of admission, the wound of the hand had a very unfavourable appearance, its ragged edges, and surface were in a state of sloughing, and the exposed cartilages of the joints, of blackish colour, fœtid thin discharge issued in considerable quantity, and he had constant recurrence of bleeding from the unsecured vessels. This local mischief, was accompanied by irritative febrile symptoms, his skin was hot; pulse small and frequent; tongue white and dry, bowels costive. As the integuments covering the little finger, ball of the thumb, and wrist part of the hand, were left in tolerably sound state, I thought it advisable to try to save the thumb and finger, and with this intention, I amputated the metacarpal bones of the fore, second, and third fingers, at the carpal joint, saving a tolerably good flap. The Radial and Ulner arteries were tied just where about to commence the palmar arch, the stump dressed, laid on a splint, and a mild purgative administered.

20th. During the 18th and 19th—the stump remained undisturbed, the bowels were kept moderately open, and only spoon diet allowed. This day the discharge from the wound being very fœtid, and of dark colour, and the stump somewhat painful, the dressings were removed, the surface of the wound presented a white unhealthy aspect, and the wrist was rather œdematous, the tongue was foul, and low febrile symptoms prevailed.

The surface of the wound was smeared with an ointment composed of equal parts of turpentine and white cerate, and the parts lightly bandaged.

R. Pil Hydrarg gr. v.
Ext. Colocynth. C. gr. iij.
Pulv. Antim. gr. iij given morning and evening.

21st.—In the afternoon of this day, he had a severe rigor, followed by fever, with pain at the stump; and at night he was very rest

less, and anxious, with a small irritable pulse.

R. Calolmel gr vi.

Ext. Co. Comp. gr. vj. with the following draught.

R. Tinct Hyosciam ℥iss.

Mixt. Camph ℥iss.

Administered at bed time.

22nd.—During the night, hemorrhage took place from the *surface* of the stump, which required a solution of the sulphate of copper to arrest it, this morning he was low, had a small slow pulse, and cool skin, and was observed to talk incoherently at times, the stump looked unhealthy.

Quininæ S. gr. iij. at morning and noon.

The stump dressed as yesterday.

P. M.—He appeared better, no return of bleeding, Skin cool.

Contr. Quininæ S. gr. ij. every three hours.

R. Tinct opii ℥j.

Mist. Camp. ℥iss at bed time.

23d.—Passed a good night, and is altogether better

Cont. Quinin. S. &

Mild aperient.

24.—The stump continued to look unhealthy, and swollen.

25.—Suppuration extended up the dorsum of the fore arm, which felt emphysematous, as high as the elbow, and the lower half of the upper arm was œdematous, the surface of the stump was foul, discharge copious and fœtid, the tongue coated, skin hot, and dry, and pulse frequent.

—— Amputated the upper arm, two inches below the shoulder joint.

Bowels acted on, and an opiate administered at bed time.

26.—Passed a good night, had diarrhœa, pulse feeble, skin cool.

R. Mistur. Cretæ ℥iss.

P. G. Kino ℥j.

Tinct. opii. gt. x. every two hours.

27.—Diarrhœa ceased—the astringent discontinued.

28.—Bowels quiet, and he is going on well.

30.—Dressed the stump, which although indolent looked tolerably well, his bowels regular, and all unsatisfactory constitutional symptoms, had subsided.

R. Quinin : S. gr. ij.

Inf. Rosar ℥iss. ter die.

Diet milk, arrow-root, and chicken broth.

From this period, no untoward symptoms occurred, the stump healed gradually, but slowly, the bowels were regulated by an occasional laxative, and the tonic was continued, with cautious improvement of his diet, he became quite stout, and was perfectly cured by end of the ensuing month.

WALTER RALEIGH.

General Hospital.

SELECTIONS.

ON THE USE OF COLCHICUM AUTUMNALE IN FLUOR ALBUS.

To the Editor of THE LANCET.

Sir,—May I beg the favour of your inserting the following communication on the use of *colchicum autumnale* in fluor albus, in your very valuable periodical :—

Some years since I was desired to visit a lady labouring under a very complicated assemblage of symptoms, and amongst them an aggravated form of fluor albus. She had a pallid countenance, swollen feet, and a profuse discharge, which various remedies failed to relieve. With a view to treat other symptoms, I prescribed the powdered root of *colchicum*, and during its exhibition the patient remarked that the leucorrhœa and œdema of the feet gradually diminished and finally ceased.

Since that time I have treated a vast number of cases of leucorrhœa with the powdered root of colchicum, and I can faithfully add, with an almost invariable success. I commence its use with three grains of the powdered bulb made into a pill with hard soap, to be given three times daily, and I increase the dose to five grains. During the period the patient is taking the colchicum, it will be absolutely nceessary for her to abstain from *every* beverage which contains alcohol. Five grains of powdered bulb of colchicum, exhibited three times daily, will very generally cure leucorrhœa in ten days. Some cases require its continuance for three weeks, and others for a month. I have several times seen the discharge return after the discontinuance of the medicine, but after further perseverance in its use, I can scarcely recollect a case which finally resisted its influence. Under the hope that it may be as successful in the hands of other practitioners as it has been in mine, I have the honour to be, Sir, your obedient servant.

GEO. RITTON.

25, Great Charles-st., Mountjoy-sq.,
Dublin, July 16th, 1834.

Lancet, August 1834.

On the Action of Chlorine on Metallic Iodides. By A. T. THOMASON, *M. D. Professor of Materia Medica in the University of London.—(From the London and Edinburgh Philosophical Magazine, June* 1834.)—It is well known that liquid chlorine, or a solution of chlorine in water, when added to solutions of metallic iodides, or, as they then become hydriodates, sets free the iodine, which can then be detected in mi-

nute quantities on the addition of starch. A small excess, however, of the liquid chlorine destroys the colour of the iodide of amidine, and renders the test fallacious. To obviate this, Dr. Thomson has substituted chlorine gas for the liquid chlorine, which he finds capable of discovering the minutest portion of any hydriodate in solution, even in mixed fluids. The following is the method pursued :—Mix a small quantity of solution of starch in the fluid to be tested, and pour on the surface of the liquid some chlorine gas. "As soon as the gas reaches the surface, a thin film of blue appears, and gradually pervades the whole of the liquid, if any hydriodate be present. The advantage of the test is the impossibility of adding too much, as the action commences on the surface, and the superabundant chlorine, which is mixed with the common air in the upper part of the test tube or glass, is soon dissipated." This test will detect the nine hundred and sixtieth part of a grain, which is quite adequate for any experiment in which it may be required to ascertain the presence of a hydriodate in solution.—*Edin. Med. and Surg. Jour. July*, 1834.

ON DELPHINE AND VERATRINE.

On Delphine. By M. Couerbe. (*From the Journal de Pharmacie, October* 1833.) —This alkaline substance, discovered by by Messrs. Lassaigne and Fenuelle, was obtained by them from the *Delphinium staphisagria* by a process similar to that by which morphia is prepared from opium. The following is the process employed by M. Couerbe. It is important that the *Delphinium* should be grey or slightly brown, because that which is black does not produce much *delphine*. The seeds are to be bruised to a paste, and treated with boiling alcohol at 36° (sp. gr. 0. 8252). An extract is then formed, which possesses a blackish-red colour, and is of a greasy nature, and very acid. It is boiled with water acidulated with sulphuric acid, until a mineral alkali thrown into it produces no precipitate. In this way the delphine is taken up in the state of an impure sulphate, aud is separated from the great quantity of greasy matter with which it is united. On pouring a solution of potass or ammonia in the liquid impure sulphate of *delphine*, the base is precipitated. This contains impurities which may be removed in a great measure by treating it with boiling alcohol, passing the tincture through animal charcoal, filtering and evaporating it. Sometimes before pulverising the delphine, it is formed into a sulphate and precipitated anew, which is preferable to pounding it, as the powder is more subtile, white, and light. In this way fifty-five or sixty grains may be obtained from a pouud of *Delphinium*. The product, however, is not in its greatest purity ; it further contains foreign substances which may be removed by the following process. The *delphine* is to be dissolved in water, acidulated with sulphuric acid, and filtered. Drop by drop nitric acid of the usual strength, or diluted with half its weight of water, is to be poured on the solution, by which a great quantity of a red sometimes very black resinous matter is precipitated ; the liquid is in a great measure deprived of colour, and becomes, as might be supposed, very acid. Care must be taken to add acid till the precipition ceases. The appearance is very remarkable, for the temperature is increased somewhat, and the precipitate is formed, as it would be under the influence of an alkali. In this experiment care must be taken to dilute the sulphate with sufficient water, otherwise the resinous matter on being precipitated would carry the delphine down with it. After leaving it to rest for twenty-four hours, the resinoid matter is glued to the bottom of the glass, and the liquid may be poured off so clear as not to required to be filtered. The glass in which the precipitate is formed is washed, and the washings added to the solution of *delphia*, which is then decomposed, by adding to it a weak solution of potass. This is separated by filtering, and washed several times with water. By forming a tincture of it with alcohol at 40° (sp. gr. 0.8095,) filtering it anew, and distilling it, there is obtained a matter of a resinous appearance, slightly yellowish, and very alkaline, which is first to be washed with boiling distilled water to separate it from the nitre, and with ether, which dissolves the alkali, and leaves a residuum.

The delphine of commerce thus contains three substances ; 1st, a resinous matter, which is of little consequence ; 2d, a substance to which M. Couerbe has given the name of *Staphisain;* and 3d, pure *Delphine*. All these are soluble in alcohol,and in water acidulated with sulphuric acid ; the resinous matter is separated by the nitric acid, and *staphisain* by ether.

The composition of Staphisain is as follows :

Carbon,	..	73.566
Nitrogen,	..	5.779
Hydrogen,	..	8.709
Oxygen,	..	11.946
		100.

Delphine, obtained pure by the process given above, is of an appearance slightly

like amber, acquires by division a colour almost white, is soluble in ether, and more so in alcohol,—scarcely in water at any temperature. Its taste is insupportable, from its acridity, which is felt in the throat and remains for a long time. It does not crystallize. At a temperature of 120° (238° F.) it is fusible. Dilute acids dissolve without altering it ; concentrated acids decompose it. Chlorine acts in a remarkable manner on *Delphine*. At ordinary temperatures there is no action, but at 150° (282 F.) or 160, (317° F.) it attacks it actively, changes its colour into green, then into a deep brown, and renders it excessively friable. During the experiment it forms hydrochloric acid. The mass, which before was soluble in alcohol, after the operation is only partly so. Ether, too dissolves but a part of the matter, which is as different from what the alcohol dissolved. In fine, there remains a pulverurent residue of a deep chesnut colour. The proportion of azote to carbon in these three compounds is absolutely the same.

The chemical composition of delphine.

Carbon,	76.69
Azote,	5.93
Hydrogen,	8.89
Oxygen,	7.49

Of Verarine. According to all known processes, this principle is very difficult to obtain ; but by the same by which *delphine* is procured, it may be prepared without the least difficulty ; and by not purifying it with nitric acid, one gros (59. 1 grains,) may be obtained from each pound of the *Veratrum sabadilla.*

According to M. Couerbe, this is not a simple substance, but contains at least three, one of which is entirely new, and capable of being crystallized perfectly well. To these three substances the names sabadilline, gum-resin, *(resinigomme)*, of sabadilline, and veratrine are applied.

The composition of these substances is as follows :

Sabadilline. ..	Gum-resin of sabadilline.
Carbon, 64.18	Carbon, 60.998
Azote, 7.95	Azote, 7.230
Hydrogen, 6.88	Hydrogen, 7.251
Oxygen, 20.99	Oxygen, 24.521

Veratrin.

Carbon,	67.39
Azote,	6.28
Hydrogen,	7.20
Oxygen,	19.13

It is unnecessary to give here all the properties of pure veratrine. We shall content ourselves with giving such as M. Couerbe has discovered, omitting those given by MM. Pelletier and Caventou, which are to be found in volume 18th of this Journal, and in most elementary works.

Veratrine appears under the form of a resin, almost entirely white, uncrystallizable, solid, friable, fusible at 115° (239° F.) Writers have placed this point much lower. M. Couerbe cannot account for this. Like alkalis, it reacts on the reddened tincture of turnsol ; it combines with, and saturates acids, forming with them various crystallizable salts. The base is almost insoluble in water. Alcohol and ether are its best solvents. Chlorine produces no remarkable reaction with this substance. The property of forming crystallizable salts was not observed by its discoverers, for they did not describe any of its salts, and no one since them, as far as M. Couerbe knows, has remarked it.

With reference to the question of priority in recognizing this property, it is requisite to say, that while the paper of M. Couerbe was read on the 20th May 1833, seven months previously Professor Turner had mentioned this property of *veratria* in his Elements of Chemistry, fourth edition. The date of the edition is 1833 ; that of the preface 29th October 1832 ; and we know that this edition of Professor Turner's Elements was in the hands of the booksellers in December 1832.—*Edin. Med. and Surg. Jour. July*, 1834.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Regulations of the Council respecting the professional Education of Candidates for the Diploma.

I. Candidates will be required to bring proof :

1. Of being twenty-two years of age.

2. Of having been engaged five years in the acquirement of professional knowledge.

3. Of having studied Anatomy and Physiology, by attendance on Lectures and Demonstrations, and by Dissections, during two anatomical seasons*.

4. Of having attended at least two courses of Lectures on Surgery, delivered in two distinct periods or seasons, each course to comprise not less than sixty Lectures.

5. Of having attended lectures on the Practice of Physic, on Chemistry and on Midwifery, during six months ; comprising not less than sixty Lectures respectively, and on Botany and Materia Medica during three months.

* An anatomical season is understood to extend from October to April, inclusive, and to comprise at least 140 Lectures on Anatomy and Physiology, occupying not less than one hour each, given on separate days ; and at least 100 Demonstrations of the like duration, given in a similar manner ; exclusive of Dissections, of which distinct Certificates are required.

6. Of having attended, during twelve months, the surgical practice of a recognized hospital in London, Dublin, Edinburgh, Glasgow, or Aberdeen ; or for six months in any one of such hospitals, and twelve months in any recognized provincial hospital.

II. Members and Licentiates in Surgery of any legally constituted College of Surgeons in the United Kingdom, and Graduates in Surgery of any University requiring residence to obtain Degrees, will be admitted for examination on producing their Diploma, License, or Degree, together with proofs of being twenty-two years of age, and of having been occupied five years in the acquirement of professional knowledge.

N. B.—Certificates will not be reeognized from any hospital unless the surgeons thereto, or a majority of them, be members of one of the legally constituted Colleges of Surgeons in the United Kingdom ; nor from any school of Anatomy, Physiology, Surgery, or Midwifery, unless the respective teachers be members of some legally constituted College of Physicians or Surgeons in the United Kingdom.

Certificates will not be received on more than two branches of science from one and the same Lecturer, but Anatomy and Physiology, Demonstrations and Dissections, Materia Medica and Botany, will be respectively considered as one branch of Science.

In the Certificates of attendance on Hospital Practice, and on Lectures, the dates of commencement and termination are to be inserted in words at full length.

All the required Certificates are to be delivered at the College ten days before the Candidate can be admitted to Examination.

(By Order of the Council),

EDMUND BELFOUR, *Sec.*

July 10, 1834.

CIRCULAR TO LECTURERS.

SIR.—In consequence of the occasional irregularities that have taken place in the certificates, transmitted to the Court of Examiners of this College, I am directed by the Council to acquaint you, that it is their anxious wish to have some plan devised and adopted by the lecturers at the various medical schools of the United Kingdom, whereby the regular attendance of the students on the lectures at such schools may be enforced and registered, so as to entitle the students to receive, and to justify the lecturers in giving, certificates of attendance, the accuracy of which may be relied upon by this College, and which the greatest vigilance and circumspection on the part of the lecturers cannot at all times secure under the present system, where there is want of some such check and registry.

The Council will consider themselves obliged by your attention to their wishes, and will thankfully receive any suggestions you may be pleased to offer on the means which, in the opinion of yourself and your colleagues, may be best adapted to effect this important object.

I have the honour to be, sir,

Your most obedient humble servant,

EDMUND BELFOUR, *Sec.*

July 2, 1834.

[*Lon. Med. Gaz. July*, 1834.

THE PILLS.

" The subject of this case was a gentleman aged about 30. He had caught cold, and sent for Mr. Coppin, a medical practitioner, who found him labouring under the following symptoms : the left side of the face, and the upper lip, were swollen and painful; skin hot and dry ; face flushed ; tongue white ; pulse 132, soft, and small ; some thirst. He stated, that previous to Mr. C.'s visit, he had taken *ten of Morison's pills*, in two separate doses.

" A weak solution of the tartarized antimony was prescribed, and a caution given to abstain from taking any more of the ' pills.'

" On the next day the patient was found to be better ; but he had several watery stools : he complained chiefly of pain in the hip, which was still much swollen. Six leeches were applied to the hip ;—to continue the medicine every second or third hour.

" Mr. Coppin, on the following day, ascertained that the patient had taken five more of the ' Morison's pills :' he again remonstrated with him, and prescribed effervescing draughts, with a pill, every second hour, consisting of a small quantity of blue pill, James's powder, and extract of hyoscyamus. On that evening the patient was worse ; he vomited his drink, and passed a watery stool ; he complained much of pain, and sickness of stomach ; abdomen full, and rather tense. The pills were omitted, and the saline draught continued, though in but half the quantity.

" On the morning of the 8th, Mr. Coppin was preparing to go out, when he received a message, excusing him from further attendance on Mr. ———. *On that day, the patient sent for the agent of this quack medicine*, who saw him, and encouraged him to persevere in the use of

the supposed specific. He was assured that the distressing gastric symptoms were the '*proper effects of the remedy*;' that '*the disease would be thus drawn downwards from his head;* and *that by perseverance, he would be soon reinstated.*' As a fit conclusion for this scene of iniquity, *ten pills additional* were administered to the sufferer, by the hands of the agent himself.

"In the course of that day, the unfortunate patient, as it were in a state of desperation, took *thirty-one* of these pills, all his bad symptoms rapidly increasing.

"On the following morning Mr. Coppin again saw him, aud found his breathing difficult. He complained of a great pain at the lower part of his chest, pulse feeble and rapid; eyes closed; had been violently purged the whole night. A blister was directed for the belly, and Mr. Coppin requested again, that a physician should be called. Dr. Labatt saw the patient for the first time, early in the morning, and found him almost moribund. He was nearly insensible; the extremities cold, and countenance collapsed; the belly swollen, hot, and tender. Some hours after this, he was seen by Drs. Labatt and Stokes in consultation. A degree of reaction had taken place: the patient spoke rationally, and knew all those around him. He declared that *he had taken more than fifty of the pills.* The abdomen was burning hot. The femoral arteries at the groin pulsated strongly; and pressure on the epigastrium produced exquisite pain. Warmth was ordered to the extremities, ice internally, and leeches to be applied to the epigastric region, where he complained of burning pain and heat. The remedies were of no avail; and the patient, who was the sole support of a widowed mother, and large family of sisters, died on the evening of that day.

"His body was examined on the afternoon of the next day.

"Body spare, but muscular; muscles rigid; face pallid, and with a slight tumefaction about the mouth; the integuments of the back externally purple; belly swelled and tympanitic.

"On opening the peritoneal cavity, the serous membrane appeared of a dark livid hue. The stomach was remarkably contracted, and presented, over the whole of its greater extemity, the most vivid possible scarlet injection, so minute as to totally obliterate all the natural appearance of the mucous membrane. This condition terminated by a well-defined line at the centre of the organ, the remainder of which was a livid slate colour, and the consistence of the whole of the membrane was completely pulpy. The livid colour and softening of the mucous membrane continued through the whole of the small intestines. The cæcum, colon, and rectum, presented a remarkable appearance. In these situations a vast quantity of serous fluid existed, of a brownish colour, and without the smallest portion of fæcal matter. The mucous membrane had totally lost the natural feel and appearance of this tissue, and to the eye and touch greatly resembled a serous membrane. Spleen large and pultaceous; liver small, and apparently healthy; bladder thickened*."

Lon. Med. Gaz. July 1834.

THE UNIVERSAL PILLS.

We can scarcely go into any street in London in which we do not see "Morison's Universal Pills, for the cure of every disease," staring us in large letters in the window of one or more shops. We learn, too, that immense numbers of them are sent not only to every part of this country, but to the Continent, to Inia, and to America. Now it appears from analysis, that they depend for their medical properties chiefly upon gamboge, a very drastic purgative, long used in medicine, but used by those who understand its action, in very small doses, and with much caution. The gamboge exists in the pills marked No. 2, in the quantity of about a grain and a half; and of these, six, eight, ten, and upwards, are sometimes given at once; thus the patient swallows about fifteen grains of gamboge for a dose!! But besides, each pill contains in addition one grain, which is made up between aloes and colocynth, two active purgatives, and half a grain of cream of tartar, which is probably added for the purpose of assisting the pulverization, and blending together of the other substances. The pills marked No. 1, contain less gamboge (about a grain), and more cream of tartar; the other constituents being the same. There is also, in both, a trace of ginger. That a mere compound of drastic purgatives should be put forth as capable of curing "every disease," might be deemed the acmé of absurdity, did we not see that the public swallow the imposture and the pills with amazing avidity. And this leads us to remark, that the components are occasionally very imperfectly mixed—probably from large quantities being prepared at a time, and the mass not triturated with sufficient care. We have repeatedly known cases where half a dozen pills have produced no effect, and yet, on taking

* Abridged from the Dublin Journal, No. XI

one or two more, most violent and almost uncontrolable purging has resulted;—a circumstance easily accounted for, by supposing the first dose to have contained little more than cream of tartar and ginger, and the second to have been nearly undiluted gamboge. At this season such doses are eminently calculated to prove injurious; and as the country news-papers too readily admit the "wonderful cures" sent by interested parties, we deem it a duty to caution the public against being deluded by them.—*Lon. Med. Gaz. July* 1834.

MORISON'S PILLS.

The Trial at York.—Verdict "Manslaughter."

A FORTNIGHT ago we published a full account of an inquest at York upon a young man, whose death was alleged to have been hastened by large and repeated doses of Morison's Pills, during an attack of small-pox. One Webb, a publican, and an agent for the sale of the pills, was the Medical practitioner upon the occasion, and was in consequence put upon his trial for having ignorantly tampered with the life of a human creature. We have now to record the result of the trial. After a patient investigation before one of the ablest judges of Westminster Hall, he was found guilty of "Manslaughter."* Upon examination we find the evidence at the inquest includes all the material facts elicited at the trial, which it is unnecessary therefore to repeat. The analysis of the pills seems, however, to have been more accurately given on the latter occasion. Mr. West, a respectable chemist, stated the results of his investigation:—

"The pills No. 1. averaged two and a quarter grains each pill, and were composed of aloes and colocynth, together one grain, but in what proportion he could not ascertain; gamboge half a grain, and cream of tartar three quarters of a grain. There was also a very small portion of ginger. The Pills No. 2. averaged three grains each, and contained of aloes and colocynth one grain, gamboge one grain and a half, cream of tartar half a grain, and ginger as before."

The counsel for the prosecution referred to the case cited by the coroner on the inquest, and to another case at the last assizes, before Mr. Baron Alderson, when a sailor was convicted of manslaughter, for having rashly and ignorantly occasioned the death of a man by giving him a large dose of opium, because his own wife was in the habit of taking it. The learned counsel dwelt forcibly upon the criminality of persons unskilled in medicines and diseases, attempting to tamper with them, where there are so many medical establishments and regularly educated practitioners spread over the country. The same point was insisted upon by the learned judge, in his address to the jury, although he admitted, as a counsel for the prisoner contended, that the statutes for licensing medical and surgical practitioners did not, and could not, make the distinction to permit one man to escape a conviction for felony, and to convict another for the same offence; in fact, it applied to both, and if either acted ignorantly, in administering strong and improper medicines, the law could reach them both. But in estimating the ignorance and rashness of the accused, it was no slight consideration that he undertook, whether gratuitously or for gain it mattered not, a duty which is apppropriated by common sense to a numerous and educated profession.

The trial of St. John Long for the murder of Miss Cashin was cited for the prisoner,—and if Morison, or Moat, or both, stood at the bar in lieu of their agent, the analogy would have been complete,—Morison and St. John Long might both have produced corresponding lists of wonderful cures and the ardour of the old fool, who swore he sold his Bible to purchase Morison's Pills, and would sell another Bible if he had it for the same purpose, might be paralleled by the enthusiasm of equally ignorant lords and ladies.

It is to be deplored, that the miserable agent of the supreme quack should have to bear the whole consequence of this audacious quackery, while the fellow, who drives his carriage on the profit of his infamous impositions, escapes unscathed. We intreat, we implore the attention of Mr. Warburton to this intolerable nuisance, of quack medicines and quack doctors. It seems almost useless to appeal to the public press not to lend its aid in advertising their base practices. The most respectable newspapers contain daily a number of impudent medical advertisements, direct impositions upon the ignorant and credulous. An operative in Warren's blacking manufacture once observed, "We keeps a poet." Every regular quack, in like manner, *keeps* a newspaper or a magazine for his sole use, and it is notorious, that the expences incurred by such persons in advertising are enormous. The nuisance has now risen to that height that the interference of the legislature is necessary for the protection of the public health.—*Lon. Med. & Surg. Jour. July* 26, 1834.

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* Six months' imprisonment was the punishment awarded in this case.—*Eds. In. Jour. Med. Science.*

ON THE EFFICACY OF THE NITRATE OF SILVER IN GLOSSITIS AND TONSILLITIS.

By James H. Horne, Esq., Surgeon, London.

EXPERIENCE has fully proved that whatever attention medical practitioners have bestowed in ascertaining the properties of the nitrate of silver for eradicating diseases, and restoring parts to their normal condition, their labour has not been employed in vain. To Mr. Higginbottom the profession are particularly indebted for much valuable information on this substance, but since the appearance of his last work ample time has been afforded for further testing the efficacy of this valuable agent. Some remedies, like fashions, have their day and then decline ; but I am satisfied that the more the nitrate of silver is tried, the better it will be found to answer our purpose ; and when used externally, and its power over a particular disease has been ascertained, we may prognosticate almost invariably the result. At least, so it has proved in my practice, during some years trial, and scarcely a day passes without my testing its efficacy in some form or other. As I feel confident that there remains much to be made known respecting it, I shall endeavour to contribute my share to the stock of knowledge, confining my remarks at present to its application in glossitis and tonsillitis.

GLOSSITIS.—*Case.*—In February last I was requested to see a lady, aged 26, of a spare and delicate constitution, who was suffering from a determination of blood to the head, with symtoms of vertigo, dimness of sight, pain and heaviness of the head, stupor, nausea, torpidity of the bowels, and loss of appetite ; she had a pulse quick and small, tongue white and furred. Blood to the amount of sixteen ounces was abstracted from the arm, and cooling saline aperients with diuretics combined were freely administered, and perfect rest was enjoined. On the following day the bleeding was repeated, and the same medicines given with great benefit, and by following up the treatment with diuretics and tonics, my patient for the time being was perfectly restored. At the latter part of the same month, I was urgently solicited to visit her again, when I found her presenting a well-marked case of idiopathic glossitis, caused by fatigue and watching, which had greatly reduced her, so much so that she was scarcely able to raise her hand from the bed. She had first felt the tongue becoming bad on the preceding day, and it got rapidly worse during the night. The tongue I found was enormously swollen, but it did not protrude from the mouth ; her respiration and articulation were exceedingly difficult ; pulse small and quick ; countenance extremely anxious ; skin moist and clammy ; bowels confined. The nitrate of silver in substance I immediately applied to the tumefied organ. This required considerable pains to accomplish effectually, for the patient could neither open the mouth, nor thrust out the tongue. In the evening the burning heat and pain, which torment the sufferer in severe cases most dreadfully, had returned, and the application was renewed to lessen the heat and to prevent further enlargement. After much difficulty also a saline aperient was forced down. Nourishment of all kinds was refused, from the insufferable torture it inflicted. Next morning both the local and constitutional symptoms were much increased, and having full confidence in the power of my remedy, I carefully repeated the application, and, to support her strength, which was now reduced to the very lowest ebb, a tea-spoonful of wine in gruel was swallowed occasionally ; but to judge of the difficulty of treatment, the sufferings of the patient, and the anxieties of the friends, this formidable disease must have been encountered by the practitioner. To prevent an unnecessary extension of this case, suffice it to say, that after regularly and assiduously using the nitrate of silver every morning for the space of a fortnight, the tongue resumed its healthy condition, which it has since preserved.

Remarks.—Cases of idiopathic glossitis like the above are, fortunately, rare, and where the patients are not of a robust constitution, I would strongly suggest that the antiphlogistic treatment should not be pushed severely. The local application of leeches and free scarifications, in mild cases, I have seen of immense benefit, but the reverse is too frequently the result in alarming cases, and the swelling and suffering will often be found to be increased dreadfully after the oozing of the blood has ceased. A case in point occurred in the early part of the year 1831 in a female, aged nineteen years, apparently of a robust constitution, addicted to spirit drinking, and used to exposure to night air. This patient I nearly lost by carrying the antiphlogistic regimen too far, and too long withholding the use of the nitrate of silver. I find that the remedy should be applied regularly, once in every twenty hours, on no consideration allowing the importunities of the patient to prevail against its longer postponement from the sharp-cutting pain it causes, or the benefit obtained will be partially lost, and the cure protracted.

ACUTE TONSILLITIS.—The same satisfactory result from the use of nitrate of silver, for the cure of acute tonsillitis, I

can confidently promise, and will illustrate its superiority over any other kind of treatment, by detailing briefly two cases, —one occurring in a plethoric habit, the other the reverse.

Case 1.—Mary E., ætat. 17 years, remarkably strong and robust, was attacked at the latter end of February 1832, and came under treatment on March the 1st, when the disease had arrived at its height, occasioning a constant dread of suffocation. A blunt stick of the nitrate of silver was placed over three or four different parts of the inflamed tonsils, and a mild gargle for cleansing the mouth and saline aperients were prescribed, with a diet of thin gruel. By persisting in this plan until the 5th, a complete cure was effected.

Case 2.—S. B., ætat. 20, has suffered from frequent inflammatory affections, and has had previously a severe attack of tonsillitis, for which she was bled largely. Very energetic measures were adopted by her former medical attendant, to prevent suppuration, which subsequently ensued, and the patient recovered after four weeks' severe illness. When I was called to her (December 7th, 1833), I found that matter had already formed in both glands, and all the symptoms of the disease were very severe. The nitrate of silver was applied as above, and I ordered the mouth to be frequently gargled with warm water. After two applications of the silver, the glands burst and the matter was discharged; and by pursuing the treatment, in less than a week her sufferings were overcome, though some time was required to re-establish her health.

Remarks.—Suppuration, according to the plans of treatment pursued, is the most common termination of tonsillitis, and, indeed, is encouraged by some practitioners in the early stage of the disease, experience having almost invariably proved the inutility of their attempts to reduce the inflammation by the usual antiphlogistic means. In constitutions which are naturally strong, this practice may be warrantable, but in others, less fortunate in their stamina, very serious mischief may be the result, through the formation of matter in the system.

Chronic Tonsillitis.—This disease, long before it is submitted to medical treatment, will be found, on inquiry, to have been fully developed. In children of strumous constitutions, chronic tonsillitis is principally met with, and it is this condition of the system (for whoever attempts to cure this disease by local applications will only be miserably disappointed, or whoever may recommend any single remedy as capable of effecting that result must expect to be treated with contempt) which must first engage our attention. Having improved that condition of the system, as far as our therapeutic means will admit, and not till then, we may expect to eradicate the disease, and to accomplish this the nitrate of silver will best answer our purpose, applying it steadily, twice a week, to the indurated glands for some months, when a complete and perfect cure may be expected. I could advance several cases of this form of the disease for further proof of its efficacy, but these would increase the length of this communication, by compelling me to make some remarks on scrofula, to an extent which I must avoid, and I, therefore, now simply trust that what I have advanced will prove worthy the attention of the profession.

5, Gerard-street, Soho, July 1834. [*Lancet, July* 1834.]

A CASE OF UNUNITED PARTURIENT LACERATION OF THE RECTO-VAGINAL SEPTUM, SUCCESSFULLY TREATED WITH METALLIC LIGATURES.

By John P. Mettauer, M. D., of Prince Edward County, Virginia.

The lady, whose case forms the subject of the following communication, was about thirty years of age when the accident occurred. Her health and constitution, as far as I could learn, had been good down to the time of her confinement, which took place some time during the month of October, 1831. The pregnancy, which resulted in the laceration, was her first, and from its history must have been more fortunate than usually follows late conceptions. Her labour was protracted and very tedious, having continued more than three days, but was marked by no other important event save the accident. Six months after the laceration took place I was consulted, and my opinion and advice requested. The history furnished at this time induced me to regard it as a case of ununited laceration; and I feared that the surfaces had healed, so far, at least, as to require denudations by art, before a reunion was likely to take place between them. An opinion to this effect was expressed to the husband of the lady, an intelligent and highly respectable gentleman of a neighbouring county; I also informed him, that it was more than probable ligatures would be required before a complete cure could be effected. Some five or six weeks after this interview, the lady was conveyed to my neighbourhood, and placed under my immediate management, having resolved to waive all considerations of delicacy, a sacrifice indeed, if she could only

obtain partial relief from her most loathsome and health-destroying infirmity.

In assuming the weighty responsibility of such a case, I am free to own, that I felt much embarrassment, the more so, as I was called upon to act in a matter of great delicacy, to say nothing of its intrinsic difficulties, without having had time to avail myself of the advice of some of my experienced brethren, or to think much upon the subject. The anxiety and determined purpose of my patient did not permit me long to doubt and fear, and, without further delay, I was summoned to examine into the nature of the infirmity.

The examination disclosed a complete disunion of the recto-vaginal wall, from the verge of the anus three inches up the rectum, and, as was feared, the divided surfaces had healed in every part of them. The cleft terminated superiorly in an angle somewhat obtuse, and the rectum had contracted upon itself, so as to render its several teguments a mere band of the width of five-eighths of an inch. On each margin of this band a whitish line was to be perceived, commencing in the angle above and continuing down to the verge. These were doubtless cicatrices, and pointed out the margin of the divided rectum. The retaining faculty of the sphincter was completely destroyed, and the unfortunate lady from that cause had been compelled to submit to constant confinement, in a recumbent posture, to prevent the loathsome accident of involuntary dejections. Long-continued irritation of the wound had induced, in the gastro-intestinal organs, a morbid susceptibility, which subjected the lady to frequent attacks of colic and diarrhœa from the slightest errors in diet. To remedy so afflictive an infirmity, it was necessary, not only to repair the breach of the rectum, but also to restore the tubular form of the rectum, and contractile power of its sphincter muscle. These ends were accomplished in the following manner :— The patient was placed very nearly as in the position for lithotomy, with the knees held apart, and exposed to the direct light of a window : the cleft was readily brought into view, by separating the vulvæ and anterior parietes of the vagina. Denudations three-fourths of an inch in width, extending from the angle down to the verge on each side, were now effected along the cicatrical lines, and a little exterior to them, by the aid of hooks, scissors curved on their flat sides, and scalpels, using them according to circumstances. As soon as the wounded surfaces ceased to bleed, they were approximated, and for this purpose leaden ligatures were employed. These were introduced from within, and in succession from the angle down to the verge, at the distance of one-fourth of an inch apart ; care was taken to give them good hold : they were made to include at the same time a belt of undenuded substance on each side. Needles very much curved were employed, with a noose of twisted and waxed silk in the eye of each, upon which to hang the loops of the metallic ligature previously formed. Dr. Physick's forceps were used for the introduction of the needles, which was found a very handy and convenient instrument. As the ligatures were applied they were tightened, so as to bring the abraded surfaces in contact, and then their ends were twisted together and cut off of convenient length. About twelve ligatures were required to close the breach. From time to time the ligatures were tightened by twisting them, and the vaginal margins of the laceration cauterised with nit. argent. to favour the formation of granulations, which it was judged would greatly strengthen the union in this part. The patient was confined to the recumbent posture in bed, with the knees tied together, to prevent, as far as possible, any disturbance of the wound. A diet of liquids was directed, as least likely to distend the lower bowels, or to elicit alvine evacuations. For four days the bowels reposed ; and, as a proof that the ligatures held the surfaces securely and perfectly in contact, the evacution which now took place did not derange the parts, or inflict much pain ; and it was now, for the first time since the accident occurred, that the propensity to deject could be resisted. In six weeks the ligatures were cut away, the parts having united perfectly. Leaden ligatures were preferred in the management of the foregoing case, as experience had proved them not only less irritating and liable to cut out when tightly drawn than any other material with which I am acquainted, but infinitely more convenient and effective in maintaining a uniform and perfect apposition by the ready facility of simply twisting them ; and as a proof that the leaden ligature may act forcibly for a long time without cutting out, when they were removed in the present instance, it could not be perceived that any material encroachmemt had been made upon the margins of the cleft. The lady is now perfectly restored, thirteen months since the operation was performed, as the following extract from the husband's letter to me will evince :—* * * " and can now with pleasure and most grateful acknowledgements of your skill and management have it to say that she feels no inconvenience from the injury sustained at the time she had her child ; and she further says that if her condition was similar to the one she was placed in before you operated, she would freely and

willingly submit to it again, if she could only believe the same degree of benefit and relief was to be the result."—*American ournal of the Medical Sciences.*

SUBCUTANEOUS VASCULAR NÆVUS CURED WITH AN OINTMENT OF TARTARIZED ANTIMONY.

By W. C. Worthington, Esq., Lowestoft.

In a Number of THE LANCET published in April last, was inserted an account of a case of vascular nævus, by Mr. C. Hickman, cured by the application of a liniment composed of tartarized antimony and olive oil.

At the time that case came under my observation, the parents of an infant had applied to me for the cure of a subcutaneous vascular nævus, situate on the right side of the chest, just below the axilla, in size a little exceeding a shilling. An insuperable objection was evinced, on the part of the mother, to its removal by excision. In accordance, therefore, with the successful treatment cited in THE LANCET, I determined upon trying the adhibition of the tartarized antimony, in the form of ointment instead of liniment.

The surface of the nævus was rubbed but a very few times before it was covered with pustules, which soon became confluent, and it was subsequently removed by the assistance of poultices. Granulations soon sprang up, which were, now and then, smeared with the argentum nitratum. Simple adhesive plaster was then applied as a dressing. The cure is now complete, nothing remaining but a superficial cicatrix.

I consider it due to Mr. Hickman that this cure should, through the instrumentality of your journal, be made known, as I deem it corroborative of the value of that gentleman's mode of treating nævus; and, morever, whenever the situation of the disease will admit of the application of the remedy, I consider it preferable to the several other plans usually pursued; insomuch as, when compared with the caustic, it is more under the control of the surgeon, equally efficient and more certain in its operation than vaccination, and much superior to the plan proposed by Dr. M. Hall, being less painful and tedious.—*Lancet, July* 1834.

ST. GEORGE'S HOSPITAL.

Concussion,—Erysipelas.—Death.

A MAN was admitted under Mr. Brodie's care, labouring under symptoms of concussion for the relief of which he was bled and purged freely with the greatest benefit, when suddenly the arm in which he was bled (the right) became tumefied and painful. To relieve these symptoms the arm was fomented and enveloped in a poultice, and saline medicines were administered, but without much effect. On the following day the painful tumefaction of the limb was increased, and the skin was covered with a vivid blush of erysipelas. It was now evident that the cellular membrane beneath the skin was affected; most probably infiltrated with serum, and to save the skin and prevent the further rapid progress of the disease, Mr. Brodie, in accordance with his usual treatment in such affections, made several deep incisions down through the skin to set the cellular membrane free; poultices were ordered to be continued, and the patients strength supported with bark and ammonia, with the addition of wine or spirits with his usual diet if they were required. This plan was continued for some days, but without any good effect, and the man died.

On a *post-mortem* examination being made, there were found (as was to be expected) several purulent deposits in various parts of the body.

We regret to add that *erysipelas* is again making its appearance in the hospital, and the cause to which it is generally ascribed is the circumstance of the floors being so frequently washed, the permission for which has been given by the chaplain. Mr BRODIE very properly remarked that with reference to this he considered the question more a medical than a *clerical* one.—*Lancet, August* 1834.

REPORTS OF CASES.

By J. Young, Esq. M. D.

Of Chester, Delaware County, Pennsylvania.

Effects of Lightning.

On the evening of June 14th, 1832, the house of Mr. C. Levis was stricken with lightning. One of his daughters, aged thirteen, was sitting on a chair in the doorway between two adjoining rooms, down the post or frame of which a portion of the electric fluid passed from an upper room; the child and chair were thrown several feet, and she fell, and remained senseless until I saw her, which was in about an hour fater the occurrence. When I arrived, a number of neighbours had collected, and in the confusion of the moment, they were all calling on me to hurry and *bleed her.* I had never seen a case of the kind before, and had not acquired, by reading or otherwise, any fixed ideas concerning the treatment of such cases; and from the bustle attendant on this case, it afforded but slight

opportunity for cool reflection and determination ; acting, however, on the surgical maxim, *festina lente*, while they were procuring bandage, &c. for bleeding, a serious doubt arose on the propriety of bleeding, under the circumstances attending it. The patient appeared to me to be in a situation entirely similar to many cases of *severe concussion* from blows, falls, &c. that I had witnessed. She was entirely insensible to every external impression, with deep, slow, interrupted respiration ; the relaxation of the muscular system was complete : the pulse, as to fulness, was nearly natural—it was soft, very easily compressible, and very slow, being only about 60, as near as could be ascertained by a second watch ; the pupil was sensible, though fully dilated. I believed to bleed under such circumstances, before reaction took place, would effectually prevent it, and instantly resolved to treat it as a case of concussion from any other cause, with the exception of *dashing* cold water on the head with my hand, a practice I had somewhere seen, or heard recommended, but have forgotten the authority ; and I only resorted to it for the sake of *doing something* to satisfy the bystanders and parents, without expecting much good to result. In this, however, I was most satisfactorily disappointed. In less than half a minute, the patient began to toss about and moan, for the first time since the accident. By a continuance of the dashing for about five minutes, she appeared so much aroused, as was evinced by crying, endeavouring to talk, though without being able, tossing, and shrinking from the cold, that we discontinued its use, had her wet clothes taken off, and had her put to bed and covered up warm. After this, she was alternately still, and inclined to doze and sleep for a minute or two at a time ; then to roll from side to side, moan, and seemed in great distress ; the surface was cold, but the pulse harder, more frequent, and quick ; the pupils were contracted, and every thing indicated a change, approaching to reaction, to have taken place : I remained with her till 2 o'clock, A. M. when it was established ; she could talk and explain her sensations. She complained of very severe pain in the head, and I now apprehended danger from the opposite quarter, to anticipate which, I bled her to twenty ounces by estimate, keeping my finger on the pulse, and not stopping till there was a perceptible change in it. Her head was bathed with cool vinegar, and as her feet were yet cold, they were enveloped in wetted horse-radish leaves. In half an hour she sunk into a composed, comfortable sleep, from which she did not rouse till half-past seven o'clock. Finding the pulse again too active, and the patient still complaining of some headache, I again bled her twelve ounces ; ordered a dose of Epsom salts to be given in three or four hours, with some other directions concerning diet, stillness, &c., and left her, with a request to be sent for, if it was thought necessary. I heard no more from her for a week, when she had almost entirely recovered from all the effects of the injury.

Fortunately, accidents of this kind are not frequent ; but still they are sufficiently so to render fixed principles in their treatment desirable. If any thing of the kind exists, I, and perhaps many others, are ignorant of where to find them ; in fact, I do not recollect reading any thing concerning it in any medical work, although elaborate essays may exist. Situated in the country, and engaged in the laborious occupation of a country practice, we have not the facilities for reference of city practitioners. If, however, we are justifiable in drawing conclusive inferences from one case, I believe the correct principle to act on is to wait for reaction before venturing to bleed, and to promote the taking place of this by cold water dashed on the head. *Query?* Might not this cold dashing be servicable in cases of severe concussion from falls, blows, &c., when the patient lies for hours, and even days, before reaction comes on? I have not had an opportunity of trying it, since I witnessed its effect in the above case, but I think it worth a trial.—*Lon. Med. Gaz.*

ON THE RELATIONS OF THE CRANIUM TO THE ORGAN OF HEARING.

Professor Mojon, of Geneva, in a memoir lately read before the Royal Academy of Medicine, has suggested some novel and very interesting speculations on this subject. Hitherto we have been led to view the cranium only as a safe recipient of the cerebral mass and of its appendages ; but M. M. ingeniously supposes that it serves at the same time as an harmonic case or drum, to the auditory organs. Treviranus, Esser, and others had already observed that the tympanum is not essentially necessary to the transmission of sounds, and that the sonorous undulations may be conveyed to the nerve of hearing by the medium of the cranial bones ; but no one, before our author, had attracted the attention of physiologists to the curious relations which seem to exist between certain states of the cranial bones and the power of discriminating musical sounds.

The post mortem examination of Dr. Bennati, first suggested to M. M. the following speculations, and they arose from

his observing that the bones of the cranium were much thinner than usual, translucent at many points, and soldered together along the line of the sutures.

A similar condition of the cranial bones, has subsequently been found by him in the body of another celebrated musician.

This coincidence of cranial attenuation, and musical endowments, led M. Mojon to consider whether it was possible that the one might be related to the other as cause and effect; and he has been induced by numerous observations to infer that the cranium is by no means quite passive, in the perception of sounds, that differences in the thickness of its walls may have very considerable influence in determining the degree of acuteness of the faculty, and therefore that it may be regarded as a sort of harmonic case which communicates its vibrations to the organs of hearing.

In confirmation of these views our author alludes to the cases of deaf people, who often can perceive very distinctly the sounds of a piano, or organ, by applying one extremity of an iron rod to their forehead, and the other to the instrument; and who may be made to hear what is said to them if only the voice is directed by a speaking trumpet upon some part of the forehead. It is not unfrequently also that a person whose hearing is indistinct, and who chances to wear a wig, can listen with much greater facility when the head is quite bare, than when it is covered.

The curious observations of M. Perier, on patients who had been trepanned, and who were found to hear quite distinctly any sound directed upon the cicatrix, even when both ears were effectually plugged, (vide our last No.) may also be mentioned as illustrative of M. Mojon's speculations.

Comparative anatomy shews that in a number of animals the transmission of sounds to the organ of hearing is assisted by numerous large sinuses, hollowed out in the bones of the cranium. To us it seems by no means improbable that the musical endowments of the feathered tribes may be in some degree at least modified, or influenced by the very attenuated condition of their cranial bones, and by the existence of the elastic lamellæ, which are found between their supernumerary cavities, as well as the passages or canals which extend into the labyrinth.

The only practical deduction from the preceding views, regards the assistance which may possibly be derived from attention to them, in our diagnosis of deafness, when we wish to discover whether it is owing to a palsied state of the auditory nerves themselves, or merely to some defect or injury of the adjunct members of the auditory apparatus. The every day occurrence of a person squeezing his head with both hands to deaden any very loud noise, may very probably effect the desired purpose, as well by interrupting the cranial vibrations, as by the direct obstruction of the auditory passages.—*Jour. Hebdomad.*

CONNEXION OF THE UTERUS WITH THE PLACENTA.

To the Editor of the Medical Gazette.

Sir,—Considering that the following account of the appearances observed in the dissection of a gravid uterus may prove interesting, as it corroborates some of the important facts which have been brought before the public by Dr. R. Lee; on the connexion of the placenta with the uterus, I beg to forward it for insertion in the *Medical Gazette.*

Mrs. T——, aged 38, of rather a delicate and weak constitution, the mother of two or three children, in the last stage of pregnancy, and expecting her confinement every day, was attacked with cholera on the 21st of July, 1834, which proved fatal in eighteen hours, although the most prompt and judicious measures were employed by Mr. Murchison, a student at the school of Webb-street, to whose kindness I am indebted for the opportunity of making the *post-mortem* examination, which was done fourteen hours after death, by Mr. Murchison, Mr. Tyson, and myself.

As the friends would allow only a partial dissection, we particularly examined the uterus; and on cutting through the abdominal parietes (which were extremely thin) the peritoneal covering of the uterus appeared more vascular than usual; the muscular coat was rather thinner than natural, and not so firm as it is generally found to be. The uterine veins or sinuses were very large, especially in the immediate neighbourhood of the placenta, towards which they appeared to run, almost like *radii*, from the circumference to the centre of a circle; they all passed longitudinally, and appeared to run for a long distance closely under the lining membrane of the uterus, before presenting their semicircular or oval openings, which were very distinct; and though great caution was used in tracing them, *none* could be found to enter the placenta, nor to pierce the tunica decidua uteri, which was beautifully seen passing behind the placenta. Vessels, apparently arteries as well as veins, of some size (three or four as large as crow quills), were distinctly seen passing from the uterus into the placenta, directly

from without inwards, and *vice versâ*, and crossing the uterine sinuses almost at right angles. The placenta separated very easily from the uterus, the vessels above alluded to offering but little resistance, the uterine veins offering none.

The mouths of these uterine veins were filled with a sort of duplicature or plug of the deciduous membrane, which was every where soft, and in many places quite pulpy.

A full-grown and well-formed male fœtus was found in the uterus. There was no dilatation of the os tincæ.

Your obedient servant,

C. MILLARD.

Dean-Street, Southwark, July 29. 1834.

[*Lon. Med. Gaz. August* 1834.

A MAN WHO CAN MAKE HIMSELF TALLER AT WILL.

At a late meeting of the Academy of Medicine in Paris, M. Velpeau exhibited a man who possesses the very singular power of making himself two inches taller or shorter at will. Standing erect, he can elongate the spine, and contract it again, by moving the sacrum, which plays like a wedge between the bones of the pelvis. He is at present 40 years of age, and had a carriage pass over his body when a child, to the injury received at which time the power of executing this curious manœuvre may be attributed.—*Gazette des Hôpitaux.*

THE INDIA

JOURNAL OF MEDICAL SCIENCE.

CALCUTTA, FEBRUARY 1, 1835.

Mr. Wilson's case of ulcer of the Pylorus forms one of those melancholy instances that baffle in their advanced state, all human efforts to prevent a fatal issue. The patient was one whom we knew and esteemed; and this led us to enquire of our friend Mr. Cheek of Burdwan, as to the nature of the disease, of which he died. On his mentioning the same, we expressed a wish to be favored with the notes of the case and autopsy, which our friend kindly promised that he would apply for to Mr. Wilson, who has politely favored us with the account accordingly. It would have been very desirable had a short sketch of the previous history of the patient's state of health been given. Suffice it that according to the best of our recollection, he was of middle stature, rather inclined to a spare make, and if we recollect right, of a fair complexion, and more pale than otherwise. We mention these particulars, because they may tend to recall circumstances to the remembrance of some of our readers, that might evince an approach to some sort of data, as to constitutional tendency to ulcer of the pylorus, for it would be a matter of great importance to form a diagnosis in such a case, since we conceive that a medicine which might be indicated in an affection of the liver and biliary ducts, might be prejudicial in ulcer of the pylorus, as for instance, calomel.

We recollect that a person, in whom after death, there was found to be a cancerous ulcer of the pylorus, was also of spare make, and of pale inclined to sallow complexion. During the life time of the latter, there was no suspicion as to the precise nature of the affection, and indeed, it was referred as much to the liver as to the stomach. The probability is that more fall a sacrifice to ailments of this nature, than may be generally supposed. In the earlier stages, could an accurate diagnosis be made, the disease would require active and decisive treatment. It unfortunately happens, however, that the approaches of the enemy are so insidious, as neither to cause apprehension in the patient himself nor to his medical advisers; and that the case is generalised upon, as one of biliary obstruction, or dyspepsia; and thus the opportunity perhaps is lost irrecoverably, of arresting the progress of the malady. The patients in both cases under consideration, it may not be irrelevant to observe, were gentlemen of careful and temperate habits, and of great placidity of temper. The delay of 24 hours which took place in the examination of the body in Mr. Wilson's case, arose from his deferring it, in hourly expectation of Mr. Cheek arriving at the station to be present. The primary cause of death becoming evident on examining the cavity of the abdomen—it

was not deemed necessary, under all the circumstances to pursue the investigation further.

With reference to the question at issue between Messrs Wise and Raleigh, we should not have deemed it necessary to say one word, but for the elaborate attempt of Dr. Wise to shew that the case of Elephant leg was not a proper one for operation. There is, it will be generally admitted, a certain degree of courtesy due from one member of the profession to another in matters of professional reference and record; the omission of which, naturally appears to have struck Mr. Raleigh as extraordinary, more especially as he conceived that the appearance of the limb (which he had himself treated, amputated, and dissected,) as stated by Dr. Wise, differed from what it was when examined by himself.

Of that discrepancy, we are not called upon to say any thing, contenting ourselves with stating that it appears quite reconcileable on the supposition mooted by Mr. Raleigh himself. It is a pity that Dr. Wise, at the time, did not state even *en passent* that the limb had been excised by Mr. Raleigh, and that his permission to the details of the dissection being published, had not been asked for. Surely when Dr. Wise was about to request of his friend, permission to describe the appearances in a limb amputated by *another*, the least which was due to that other was, that *his* consent should also have been sought for and obtained. But Dr. Wise purposely avoided mentioning Mr. Raleigh's name, and the circumstances of the case, because he differed in opinion with him as to the propriety of amputation in this disease. How Dr. Wise came to pronounce so confidently respecting a case of which he could have known nothing save from inspection of the dead limb, does not appear very obvious even from that elaborate critique in which he condemns the operation. One of the Editors of this Journal having been a consulting party to that operation, and entirely approving of it, our readers will admit that we have some right to comment freely on the subject. *Ex post facto* opinions and dicta, upon matters of medical science, are after all but of little worth, and we are free to confess that we do not deem references to authors and books, in order to bolster such up, of great value, when compared with practical decisions, on peculiar circumstances, formed at the bedside of the patient. In the case under consideration, the man's limb was a loathsome burden to himself, that ere long must have deprived him of life. The operation was cheerfully acceded to, after due consultation, and those who are aware of the difficulty there is in getting a Bengallee to consent to such an operation, under any circumstances, may easily imagine how much he must have suffered before he so readily agreed to undergo it. The operation was accordingly performed, and the best corollary upon Dr. Wise's condemnation of it, is, that the man to this day is alive and hearty. It would have been more agreeable to our feelings to have abstained from any observation on this matter at all, especially as we hold both parties in such high estimation. Being however, equally amenable to censure, if any be merited, for the performance of the operation as Mr. Raleigh, we deemed it right to evince that the charge does not sit heavily on our minds, and we trust that our friend Dr. Wise will take in good part all we have stated, as it has in a measure been rendered necessary in self-defence.

Dr. Wise's case of Ruptured Vein inculcates an important practical lesson—viz. that if in consequence of some pressing exigency it be deemed necessary to put a ligature upon a vein, the same may be removed even 24 hours afterwards, when the intention of applying it, viz. that of producing adhesive inflammation, will be found to have taken effect. The further continuance of the irritative body may produce suppuration, and perhaps other unpleasant effects. Our author's caution, therefore of applying a slip-knot so as to admit of speedy removal with-

out difficulty, should not be lost sight of. Dr. Wise favored us at the time he sent in his paper with a preparation of the portion of the vein removed, which was in entire accordance with the description he has given. Unfortunately whether owing to the delicacy of the texture, or the strength of the spirit, within the last two or three weeks, the preparation has fallen into fragments, and is no longer amenable for the purpose of morbid illustration. Indeed the difficulties in the way of preserving morbid specimens in this country are very great, and we should be obliged to any of our readers who could give a few hints on the subject for the benefit of pathological science.

It is but justice to our valued contributor Mr. Raleigh to say, that the non-appearance of his instructive and ably-drawn up Hospital Summaries, for a Number or two, has occasioned some anxiety among several of our Subscribers. We deem it unnecessary to say any thing further on that head, since our present number will afford satisfactory proof that he is not asleep at his post. The observations that occur in his Summary relative to colic, will be found well worthy the consideration of the practitioner. Various pathologists have, we believe, attributed, attacks of colic in some degree occasionally to biliary obstruction, but we do not recollect that any one has stated his opinion on that head so simply or distinctly as Mr. Raleigh, who attributes the particular form of this most painful, yea, agonising ailment, to which he alludes, to checked hepatic secretion, or in other words, the absence of bile from the intestines. The practical inference drawn from this conclusion by Mr. Raleigh, is direct and highly important, and his success in the treatment would appear to warrant the correctness of his reasoning.

MEDICAL RETIRING FUND.

It is not perhaps too much to say that as respects local questions, a man rarely approves of what does not, in some way, bring credit to himself. It is therefore no wonder that some people are careless of, and some are against the Medical Retiring Fund: among the latter may be found those whose plans have not been wholly adopted; and those fore-tellers, who spoke not true as to its ill success.

Upon the Committee of Management of the Medical Retiring Fund, animadversion, amounting almost to abuse has been dealt forth with an unsparing hand. That body has been accused of arrogance, presumption, illegality, hole-and-corner-ism, and idleness, by the Editor of at least one newspaper in Upper India; and Calcutta has not been wanting in voices to imitate the cry.

In cases of this kind it happens, for the most part, that general accusation can be met but by general denial. But here there are, fortunately, some points that can be seized upon, and it is our end in this paper, to set people aright as to fact; their conclusions will be, we suppose, as in all other cases, according to the modes of thinking of those who draw them,—somewhat differing.

The charge of arrogance and presumption is the first upon the list. It consists in this. The Committee of Management at Calcutta has altered, with the consent of the majority of subscribers, what, with the same consent, was agreed to by the (if we may use such a term) Constituent Committee at Agra.

To compare small things with great. When the Agra Committee had brought forth its plan, in (as was said by a speaker at the last quarterly meeting) all its pristine lustre, pure, like the Persian Daric of old, that could not be altered but by the debasement of the coin, it followed the example of the Constituent Assembly of France, and laid down its existence and its plans at the feet of others. Unfortunately, however, the code of laws of the Agra Committee, like the constitution of the Assembly, was found impracticable; perfect in the closet of the framers, but useless in the field of life. The Calcutta Committee accordingly did unto this code as the Legislative did unto that of the Constituent Assembly: hitherto, with a far better result.

It is as impossible to be angry with, as it is to help being amused by, this method of framing laws for other men to execute: this idea of quietly, by one's own fire side, gaining battles by argument, that others are to do in action. There is too, a self-complacency about it, that would be quite delightful, were it not for its sorrowful effects. History whether great or small, whether of nations or of institutions, has read to mankind one unvarying lesson—constitutions arise from the exigencies of years, and not from the determinations of a day.

After all, however, but two alterations of consequence (we grant that they were great ones) were made by the Calcutta Committee. One was the giving of Annuities instead of Bonuses; the other, the admission of Members of the Medical Board. For the first; it was thought by the Calcutta Committee' that six Bonuses (so stood the Agra plan) of thirty thousand rupees each, together with the salary of the Secretary and other expences of the Fund, coming up altogether to nearly two lacks of rupees a year, could not be raised from a service now so poor as our's. But, by the system of Annuities, the Fund profitting by the lapse of life, three hundred pounds a year for six annuitants, could be readily collected, probably without ever having need to call for a higher subscription, than the minimum rate laid down in the Agra plan From all that has as yet taken place, this opinion seems to be true.

As to the admission of Members of the Medical Board, upon the understanding of the Agra Plan that "Members of the Medical Board after having held that rank for two years should forfeit all claims upon the fund;" it seemed meet to the Committee, that men had a just claim, without restriction, to the benefits of an Institution, one main object of which was to grant those benefits, for which they had for years subscribed. Were they thus shut out, few people looking up to the Board, as the end of their Indian transportation, would subscribe at all. The clause would have cut off from the Fund the subscriptions, of the three members of the Medical Board, the whole of the Superintending Surgeons, and older Surgeons, and in short, of every man whose necessities or whose ambition led him to look up to the higher places of the service. This was an important consideration to the Committee. The law was as impolitic as it was unjust.

But there was another thing against this law of exclusion, of which the Committee was not then aware; and its not being so shews, that it judged according to the judgment of right minded men: the Court of Directors would not have allowed it to remain. I was a law in the Bombay plan, and its being altered was made the condition, upon which that plan was sanctioned by the Court.

We wish not to make a comparison with others; but it has been forced upon us, or rather already made to our hands by the *Mofussil Ukhbar*, the organ of the Agra Committee; and by comparison only are certain minds enabled to judge of things at all. We ask then, if the Calcutta Committee was upon this point inferior to its brother Committee at Bombay.

With regard to illegality. We have before acknowledged, that the Calcutta Committee of Management did presume to alter the plan submitted to it by the Constituent Committee of Agra: and we are aware, that its doing so gave rise to the cry of illegality. Let us calmly look over this accusation, and we trust it will vanish as easily as that of arrogance and presumption has already done.

By an article in the constitution of the Fund, framed at Agra and approved of in Calcutta, any alterations in its fundamental laws, must be made by consent of two thirds of its members. Should a member wish to alter any one of these laws, he can do so by submitting his proposition, through the Committee of Management, to the Subscribers at large; when, should there be two thirds of the votes given in favour of his proposition, it becomes a law of the Fund. This was the very course followed by the Committee of Management. The laws of the Agra Committee being found impracticable, others were framed, and submitted to the members

of the Fund; and all, we believe without a single exception, received their sanction. We have yet to learn, that the same thing done by one man is legal; and illegal, if done in the same manner by eight men, equally competent to act at all. It must not be forgotten too, that to prevent the members being taken by surprize, the Committee published bit-by-bit, the whole of their proceedings in every newspaper at the Presidency: thus gaining the double advantage, 1stly of making each member fully conversant with the subject, and 2dly of affording time for any suggestions to be offered. To a simple minded man, one would think, nothing could taste less of illegality and hole-and-corner-ism than this.

But the whole of the subscribers, it is said did not vote, upon these propositions of the Committee of Management. Is the Committee in fault for this? Of those subscribers who did vote, a very great majority voted for the alterations of the Committee, when by the regulations they became laws of the Fund. Is any one bold enough to say, that the Committee would have been justified in setting aside the wishes of those who voted, in deference to the wishes, (even if they could be got at,) of those, who were either too indifferent, or too well satisfied with what was doing, to vote at all? Of all foolish accusations this, beyond all doubt, is the most foolish we ever heard of! A pretty piece of legislation truly, would that be, which was carried by the supposed opinions of those who, did not vote!

It will be seen that we have not taken the trouble to deny the assumption, that all who did not vote were against the propositions of the Committee of Management. It is not necessary. Our opponents are welcome to the full benefit of their fore-gone conclusion.

Hole-and-corner-ism—It might have been thought, that an accusation like this would have been spared against a Committee, that had published its every proceedings, almost usque ad nauseam; whose every meeting was open to any, and to all; and, that had shewn itself so little influenced by a hole-and-corner-spirit as to give up even the power it had of electing its own Secretary, taking him, instead, from the Members of the Fund at large. The particular proceedings, to which the term was applied, were those merely of a meeting of the Committee of Management; and it was used because that meeting was not called by advertisement. It would be in fact, very absurd to call in that way eight men to meet together, when it could be done better by a private note. It is clear, however, that the point was mistaken; the paper that made the accusation not being aware, that the proceedings of that meeting were published only, in order that the Members of the coming Quarterly Meeting, might have an idea of what they would probably called upon, to confirm and adopt.

Lastly idleness:—here a few words may be enough. Night after night the Committee met, and deliberated upon the best mode of "licking into form" the *irrevocable plan of the* FOURTH PRESIDENCY! Not upon any one of these meetings was there the least difficulty in forming a quorum: every private engagement was given up; every inconvenience cheerfully submitted to; and, as a further proof of zeal in the cause it may be told, that every individual member of the Committee, save one, made himself answerable for the expences, likely to be incurred before a reply to the memorial to the Court of Directors could be received: this responsibility, moreover, was not a nominal one; for at that time not a rupee had been gathered, and it was doubtful if there ever would; while the expences were great and sure.

For the work done at that time by the Committee, we turn to the papers of the day. But much, never published, was done. Letters, Circulars, Memorials were written; regulations sent to the Members of the Fund; and people of knowledge and influence consulted; till, at length, all was done, that the Committee had power to do before the answer of the Court should arrive. That answer came at length, and the Committee immediately resumed its labours with a zeal

which shewed it still untired. It is not the least curious thing connected with these proceedings, as shewing that ignorance and injustice, though travelling by different ways often meet at the same cross, that, at the very time one paper accused the Committee of *idleness*, another brought forward a charge of *precipitation!*

The Calcutta Committee has been unjustly reproached, because, the Bombay Fund is already in operation, while our's is still in abeyance. But the fact has been carefully kept out of sight, that the Bombay Plan had been drawn up, and sent home, before the Bengal Plan was even thought of; and had thus a start of nearly two years. But so little deserved is the reproach, that we hesitate not to say, that had it rested alone upon the industry of the Committee of Management, and had the answer of the Court been a clear and decided one, the Fund this day would have been in operation. Indeed as a proof of the willingness of the Committee, we need but turn to the resolution passed at an above-mentioned private meeting, to offer the Annuities this year; and which offer was obliged to be put off, for a time, when it was found out, that another reference to the Court was necessary, ere the Government could sanction the establishment and security of the Fund.

We have spoken thus confidently of the past because we have the means of knowing the truths of what we have said. Of the fitness of the Committee of management, for the work it has undertaken to do, we need not speak, for it will be known by its fruits. But we can say, that no body of men ever yet met with purer motives, or with a more zealous desire for the fulfilment of its duties.

On the other hand the Committee has reason to be thankful,—it *is* thankful, for the unbounded confidence placed in it by the service: Let that confidence be continued for so long a time as it is deserved. Let the members of the Fund rely upon the integrity, the industry, and the zeal of their managers. Let every subscriber pay up his subscription without delay: And we will pledge ourselves, that ere many months are over, the labours of the Committee will be crowned with success; and that great object obtained under its auspices, that, heretofore, for many years had been attempted in vain.

MEDICAL INTELLIGENCE.

GENERAL ORDERS RELATING TO THE MEDICAL SERVICE.

GENERAL ORDERS BY HIS EXCELLENCY THE RIGHT HON'BLE THE GOVERNOR GENERAL OF INDIA IN COUNCIL.

The 1st December, 1834. His Excellency the Right Hon'ble the Governor General of India in Council directs, that the subjoined Paragraphs, from a Letter No. 35 of 1834, from the Honorable the Court of Directors, in the Military Department, dated the 4th June, be published in the *Government Gazette*, and that the following rule founded thereon, be established at all the Presidencies of India.

Para. 3. By our Letter of the 9th April 1834, (No. 22) you were informed that we acceded to the recommendation of the Governor General, that Assistant Surgeons at Civil Stations, not drawing more than 300 Rupees a month, should be granted a Conveyance Allowance of Thirty Rupees a month; and we now sanction the further grant of Twenty Rupees a month (as recommended by the Governor General in his Minute of the 31st October 1832) to such Surgeons of Civil Stations as may be appointed Superintendents of Vaccination.

4. We also sanction the several other suggestions forming part of the Governor General's Minute of the 27th June and 31st October 1832, limiting as he has proposed to do, the total expense on account of Vaccination, to Rs. 40,000 per annum.

5. As the suggestions now adopted appear to be generally applicable to the other Presidencies, we desire that after maturing your own plans you will instruct the other Governments to adopt corresponding arrangements in their respective Territories as far as circumstances may render them applicable and necessary.

RULE.

"That from and after the 1st January next ensuing, there shall be allowed to all Assistant Surgeons at Civil Stations, whose total allowances do not exceed 300 Rupees per month, the additional sum of 50 Rupees, viz. 30 Rupees as Conveyance Allowance, and 20 Rupees as compensation for undertaking the duty of superintending and diffusing the practice of Vaccination. The Governor General in Council expects that all Medical Officers drawing higher allowances than above indicated, will gratuitously undertake the duty."

10th.—No. 232 of 1834.—The Right Honorable the Governor General of India in Council is pleased to make the following Appointment:

Assistant Surgeon Charles Wray Fuller to the Medical Duties of the Civil Station of Kishenaghur, vice Barker placed at the disposal of His Excellency the Commander in Chief.

Mr. Thomas Christopher Hunter is admitted to the Service, in conformity with his appointment by the Hon'ble the Court of Directors, as an Assistant Surgeon on this Establishment. Date of arrival at Fort William, 3d December 1834.

The undermentioned Officers have returned to their duty on this Establishment, without prejudice to their rank, by permission of the Hon'ble the Court of Directors :

Assistant Surgeon Samuel Holmes, of the Medical Department, arrived at Fort William 3d Dec. 1834.

Assistant Surgeon Falls Hartt, of the Medical Department, ditto 4th ditto ditto.

The following Promotions are made in the Subordinate Medical Department :

Assistant Apothecary John Bond to be Hospital Steward, from the 19th November 1834, vice Hospital Steward T. C. Gale deceased.

Hospital Apprentice George Oliver to be Assistant Apothecary, from the 19th November 1834, vice Assistant Apothecary J. Bond promoted to Hospital Steward.

No. 236 of 1834.—The following Paragraphs of a Military Letter, No. 19, dated 11th July 1834, from the Hon'ble the Court of Directors to the Governor of the Presidency of Fort William, are published for general information :

Letter from, dated 22d November, No. 114 of 1833, Paragraphs 1 to 4—Submit a Memorial from the Medical Officers, praying the Court to give their support to a separate Medical Retiring Fund, and to bestow similar benefits to those granted to the Madras Medical Retiring Fund, with reference to Donation rates of Interest and Exchange.

(Vide G. O. No. 97, of 18th June, 1832.)

1. We are prepared to sanction the Institution of a separate Retired Fund for the Medical Officers upon your Establishment, but we cannot consent to grant to it any specific Donation, nor any advantages in the shape of Interest or Exchange beyond those mentioned in our Despatch dated the 6th March 1832, (No. 15 of 1832.)

2. Neither can we allow of the remittance through our Treasury of so large a number of Annuities of £300 as will provide for six being annually granted. The number must be limited to three, which is a full proportion relatively with that which we fixed for the Military Service in the event of a Retired Fund being instituted by the Army.

No. 239 of 1834.—Assistant Surgeon H. Clark, First Assistant to the Behar Opium Agency, has been permitted, in the General Department, under date the 1st instant, to be absent from his duties for six months, from the 1st February next, to enable him to proceed to Simla, for the recovery of his health.

19th.—No. 242 of 1834.—The Right Hon'ble the Governor General of India in Council is pleased to make the following Appointment :

Assistant Surgeon W. A. Green to the Medical duties of the Civil Station of Moradabad, in the room of Assistant Surgeon Brett, who has been placed at the disposal of the Commander in Chief.

The undermentioned Commissioned and Warrant Officer has returned to his duty on this Establishment, without prejudice to his rank, by permission of the Hon'ble the Court of Directors :

Assistant Surgeon Andrew Vans Dunlop, M. D., of the Medical Department, arrived at Fort William 2d Dec. 1834.

The following Officers are permitted to proceed to Europe on Furlough :

Surgeon Andrew Murray, M. D., of the Medical Department.—On account of private affairs.

Surgeon William Dyer, of the Medical Department.—Ditto.

Mr. Veterinary Surgeon Hulse temporarily attached to the Haupur Stud, is removed from that situation, and placed at the disposal of His Excellency the Commander in Chief.

24th.—The services of Assistant Surgeon R. Laughton, attached to the Political Agency at Umballa, are, at the request of the Commander in Chief, placed at His Excellency's disposal.

31st.—Assistant Surgeon Henry Chapman to the Medical duties of the Civil Station of Cuttack.

The undermentioned Officers are permitted to proceed to Europe on Furlough ;

Superintending Surgeon William Thomas, of the Medical Department.—On Medical Certificate.

Assistant Surgeon Gavin Turnbull, of the Medical Department.—On account of private affairs.

ORDERS BY THE RIGHT HONORABLE THE GOVERNOR OF BENGAL.

3d December. The following Officer has obtained leave of absence from his Station :

Mr. A. Kean, Assistant Surgeon, attached to the Civil Station of Moorshedabad, for one month, on private affairs.

10th.—The following Officers have obtained leave of absence from their Stations :

Mr. A. Wilson, Assistant Surgeon, attached to the Civil Station of Rajeshahye, for one month, on private affairs,

The Orders of the 24th ultimo, granting leave of absence for ten days, on private affairs to Mr. G. N. Cheek, Assistant Surgeon of Burdwan, are cancelled, as requested by him.

13th.—The following Officer has obtained leave of absence from his Station :

Mr. H. H. Goodeve, M. D., Assistant Surgeon, atttched to the Civil Station of Midnapore, for a fortnight, on private affairs. Mr. Cumberland, the Medical Officer of the 34th Regiment N. I., is permitted to Officiate in Charge of the Medical duties of Midnapore, during the absence of Mr. Goodeve.

The services of an Assistant Surgeon being no longer required with the Jungypore Re-

sidency, Assistant Surgeon G. J. Berwick, M. D., is placed at the disposal of His Excellency the Commander in Chief.

General Orders by the Right Honorable the Commander in Chief.

1st December, 1834. Assistant Surgeon W. B. O'Shaughnessy, M. D., is appointed to the Medical charge of a Detachment of the 72d Regiment Native Infantry, proceeding to the Upper Provinces on Escort duty with the Camp of the Honorable the Governor of Agra.

Dr. O'Shaughnessy will join the Detachment at Barrackpore, on the 12th instant.

2d.—The following District Orders by Brigadier J. Tombs, Commanding the Rajpootanah Field Force, under date the 11th ultimo. are confirmed:

Directing Assistant Surgeon J. Greig to receive Medical charge of the European Artillery proceeding on Service; Assistant Surgeon W. H. Rogers, of the 4th Light Cavalry, to afford Medical aid to the sick of the 1st Company 2d Battalion of Artilery left at Nusseerabad; and appointing Hospital apprentice Edward Smith to act as Assistant Apothecary and Assistant Steward with the Artillery proceeding on Service, vice Bond remaining in Cantonments.

Nominating Assistant Surgeon G. E. Christopher, of 2d Regiment Light Cavalry, to the Medical charge of the sick of Colonel Kennedy's Detachment, and those of the 3d, 32d and 36th Regiments Native Infantry and 4th Regiment Light Cavalry remaining at Nusseerabad and directing the Native Doctor attached to the Native Artillery, and the Native Doctor and that portion of the Establishment of the 4th Light Cavalry, who are in the Cantonment, to place themselves under the orders of Assistant Surgeon Chistopher.

3d.—The Meerut Division Order by Major General the Honorable J. Ramsay, under date the 18th ultimo, directing Assistant Surgeon J. Murray, M. D., of the 1st Brigade Horse Artillery, to afford Medical aid to the 69th Regiment Native Infantry, on the departure of Assistant Surgeon S. Lightfoot to join the 15th Native Infantry, is confirmed.

The Station Order by Major R. Hornby, Commanding at Jubbulpore, under date the 11th ultimo, directing Assistant Surgeon C. J. Macdonald, of the 29th Regiment Native Infantry, to afford Medical aid to the Prisoners in the Jail and to the Nujeeb Corps, during the absence, on duty, of Surgeon G. G. Spilsbury, is confirmed.

4th.—The Sirhind Division Order of the 15th ultimo, directing Assistant Surgeon M. Lovell, of the 9th Regiment Light Cavalry, to proceed to Subathoo and afford Medical aid to the Nusseree Battalion, during the indisposition of Surgeon J. G. Gerard, and the Kurnaul Station Order of the 22d ultimo, directing Surgeon E. Macdonald, of the 9th Regiment Light Cavalry, to afford Medical aid to the 39th Native Infantry, vice Surgeon W. Findon promoted to Superintending Surgeon, are confirmed.

5th.—The Cawnpore Division Order by Brigadier C. H. Churchill, under date the 22d ultimo, directing Assistant Surgeon A. Crighton, M. D., of the 5th Regiment Light Cavalry, and Assistant Surgeon W. Rait, doing duty with the 48th Native Infantry, to proceed, the former to Mynpoorie, and the latter to Etawah, and afford Medical aid to the Civil and Military Establishments at those Posts respectively, is confirmed.

The Order by Brigadier General R. Stevenson, C. B., Commanding the Force assembled for Service in Rajwarra, under date the 19th ultimo, appointing Assistant Surgeon M. S. Kent, of the 7th Regiment Light Cavalry, to the charge of the Medical Depôt attached to the Force, is confirmed.

Assistant Surgeon C. Llewellyn is removed from the 35th, and posted to the 73d Regiment Native Infantry.

Assistant Surgeon W. A. Bruce, M. D., now doing duty with the 35th Native Infantry, is posted to that Regiment, vice Llewelyn.

The undermentioned Officer has leave of absence:

Medical Staff—Superintending Surgeon T. Tweedie, Allahabad Circle, from 16th December to 16th May 1835, to visit the Presidency, on Medical Certificate, preparatory to applying for Furlough to Europe.

8th.—The Nusseerabad Station Orders of the 22d ultimo, directing Assistant Surgeon J. Duncan, M. D., to join and assume Medical charge of the 54th Regiment Native Infantry, and to afford Medical aid to the Staff, Detachment of European Artillery and Rissallah 5th Local Horse, during the absence of Assistant Surgeon W. H. Rogers; also appointing Assistant Surgeon W. O. H. McCheyne to the Medical charge of the 17th Regiment Native Infantry, vice Assistant Surgeon Rogers proceeding on Service, are confirmed.

Assistant Surgeon James Duncan, M. D, now doing duty with the 54th Native Infantry is posted to that Regiment vice McCheyne.

10th.—The following individuals of the Subordinate Medical Establishment are appointed to the Detachment of His Majesty's Troops now in Fort William, and under Orders to proceed to the Upper Provinces:

Assistant Apothecary Francis O'Sullivan.

Apprentice John Hornby, as Acting Assistant Steward.

Hospital Apprentice Jonas Leach.

12th.—The Cawnpore Division Order of the 29th ultimo, appointing Veterinary Surgeon D. Cullimore, of the 2d Brigade Horse Artillery, to the charge of the Horses of the 5th Regiment Light Cavalry, is confirmed.

The Station Order issued by Lieutenant Colonel J. Harris, Commanding at Goruckpore, under date the 27th ultimo, directing Assistant Surgeon J. Steel, M. D., (Civil Assistant Surgeon) to receive Medical charge of the Artillery Detachment and left Wing 63d Regiment Native Infantry during its stay at that Station,, is confirmed.

The undermentioned Officer has leave of absence:

16th Regiment Native Infantry Assistant Surgeon T. C. Elliot from 25th January 1835 to 25th March 1835, to visit Rajpootanah, on private affairs.

16th.—The Meerut Division Order of the 3d instant, directing Veterinary Surgeon J. Ford, of the 1st Light Cavalry, to take charge of the Horses of the Artillery at Meerut, during the absence of Veterinary Surgeon Griffith, or until further orders, is confirmed.

Assistant Surgeon W. Dunbar, M. D., is directed to do duty with the Artillery at Dum-Dum.

19th.—With the sanction of Government, the Commander in Chief is pleased to confirm the following Appointments, made by Brigadier General R. Stevenson, C. B. Commanding the Force assembled for Service, in Rajwarra, from the 18th ultimo:

Surgeon T. Stoddart, 22d Regiment Native Infantry, to be Field Surgeon.

The following Orders by Brigadier General R. Stevenson, C. B. Commanding the Troops employed in Rajwarra, under dates the 28th October, and 19th, 21st, 22d, 24th and 25th November, are confirmed:

28*th October*.—Nominating Surgeon Thomas Stoddart, of the 22d Regiment Native Infantry, to afford Medical aid to the Officers of the General Staff with the Force.

19*th November*.—Nominating Assistant Surgeon J. McRae, of the 3d Troop 3d Brigade Horse Artillery, to the Medical charge of the Officers of the General Staff, vice Surgeon T. Stoddart appointed Field Surgeon to the Force.

21*st November*.—Directing Surgeon G. T. Urquhart, of the 7th Regiment Light Cavalry, to receive Medical charge of the 22d Native Infantry from Surgeon Stoddart.

Surgeon Andrew Simson, M. D., new promotion, is posted to the 46th Regiment Native Infantry at Neemuch.

Assistant Surgeon William Thomson is removed from the 46th to the 10th Regiment Native Infantry at Barrackpore.

Assistant Surgeon John James Boswell, (on Furlough) is posted to the 32d Regiment Native Infantry.

The undermentioned Officer has leave of absence:

10th Regiment Native Infantry—Assistant Surgeon W. Thomson, from 1st January 1835 to 1st October 1835, to visit Hazareebaugh and the Presidency, on private affairs.

22nd.—The undermentioned Officer has leave of absence:

46th Regiment Native Infantry—Assistant Surgeon Andrew Vans Dunlop, M. D., from 13th January 1835 to 13th February 1835, to remain at the Presidency, on private affairs.

23d.—Assistant Surgeon S. Holmes, of the 3d Regiment Native Infantry, recently returned from Europe, is directed to proceed to Cawnpore and do duty under the Superintending Surgeon at that Station.

24th.—Assistant Surgeon W. Dunbar, M. D., now doing duty with the Artillery at Dum-Dum, is posted to the Ramghur Battalion, vice Harper promoted.

The Chittagong Station Order of the 14th instant, appointing Civil Assistant Surgeon J. O'Dwyer to the Medical charge of the 55th Regiment Native Infantry and Artillery Details, is confirmed as a temporary arrangement, during the absence of Assistant Surgeon H. Chapman.

26th.—The Commander in Chief is pleased to post Assistant Surgeon R. Laughton to the Nusseree Battalion, vice Gerard removed.

29th.—The Order by Brigadier General R. Stevenson, C. B. Commanding the Troops on Service in Rajwarra, dated the 10th instant, directing Assistant Surgeon W. H. Rogers, of the 4th Light Cavalry, to receive Medical charge of the 22d Regiment Native Infantry from Surgeon G. T. Urquhart, who proceeds with Brigadier J. Kennedy's Detachment, is confirmed.

The Allahabad Garrison Order of the 15th instant, appointing Surgeon J. Eckford, of the 12th Regiment Native Infantry, to officiate as Superintending Surgeon, on the departure of Superintending Surgeon T. Tweedie, and directing Officiating Garrison Assistant Surgeon R. J. Brassey to receive Medical charge of the 12th Regiment Native Infantry, is confirmed as a temporary arrangement.

Subordinate Medical Department—Assistant Apothecary J. G. Scott, from 1st January 1835 to 28th February 1835, to remain at Dinapore, on private affairs.

ORDERS BY THE HONORABLE THE GOVERNOR OF AGRA.

23d December 1834.—Mr. A. Chalmers, Civil Surgeon of Cawnpore, is, at his own request, placed at the disposal of His Excellency the Commander in Chief.

30th.—Mr. C. Madden, Civil Assistant Surgeon of Futtehpore, has obtained one month's leave of absence, on private affairs, from the 10th January to the 10th February next.

TO CORRESPONDENTS.

The following papers have been received since our last.

Curious case of lead, imbedded in the Tibia: with a drawing. By JAMES ATKINSON, ESQ.

Cases of diseased Mesenteric Glands and Peritoneum. By W. A. GREEN, ESQ.

Report of the climate of the Eastern Frontier of Kumaon. By JOHN MCCLELLAND, ESQ.

Vindex.

Five cases of Blindness restored to sight by operations. By F. H. BRETT, ESQ.

Scotus No. 5.

Apoplexy at Chunar. By A. K. LINDESAY, ESQ.

On Ergot of Rye in Uterine hemorrhage. By J. INNES M. D. ☞ Dr. Innes' other promised communication will be most acceptable.

Kirkmichael No. 3.

We are obliged to Dr. Fuller for a specimen of morbid structure, removed by operation; and shall be glad to receive an account of the case.

Observations upon bleeding in the cold stage of fever by T. C. together with other communications in arrears, shall be inserted as soon as possible.

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ORIGINAL COMMUNICATIONS.

CLIMATE OF KUMAON—THE TEA PLANT.

To the Editors of the India Journal of Medical Science.

Sirs.—The various causes, which contribute to render the climate of China, in some degree, different to that of the countries which lie in the same parallel of latitude, may be partly discovered by an attentive observation of its position on the best maps. The frozen continent by which it is bounded on the north, and north east, extending to the Arctic ocean, must on the principles long explained by Dr. Halley, occasion prevailing currents in the air, passing to the south, during the winter solstice. On the west lies the mountainous region of great Thibet, from which the whole empire of China is inclined with an aspect to the northern pacific, which may be said to bound the empire on the east. The whole of their great rivers consequently run to the eastward, and this gives us, the general direction of the mountain-groups; which are said to traverse the country, as they must be parellel to the great river vallies, presenting acclivities, alternately to the north and south.

Such circumstances when conjointly considered, will enable us to appreciate the nature of the peculiarities of the climate of China; and at the same time, may guide us in selecting other countries, possessing as nearly as possible, the same general character; or such as may suit the object contemplated by the committee.

Regarding the geological structure of the tea districts of China, one author tells us a "white sandy" soil affords the best, and another that "stony lands" are best, and that the worst is produced in "yellow soil;" a third writer says the plant grows in a gravelly soil, which is formed by disintegrated sand-stone, and often also, in soils formed of the debris of primitive rocks. Although there is a striking coincidence in all these statements, it is necessary to remove a slight ambiguity arising out of names. There is little doubt but that the "white sandy" soil of Du Halde, the "stony lands" of P. le Compte, and the "gravelly soil," of Dr. Abel, are all pretty much the same, and may be considered as silicious earth. We may be equally satisfied, that the "yellow soil" of P. le Compte is argillaceous clay containing an oxide of iron. The great repositories of siliceous earths are the granites and sandstones, while those of the argillaceous earths, are the clay-slates, which doubtless comprise the schistus mentioned by Dr. Abel. There is reason to believe that the sand stone mentioned by these authors is a different rock, to the sand stones found in Europe, and that it does not even belong to the same class. The reason for this supposition, is the unusual circumstance of floetz sand stones being associated in nature with primitive rocks, as that observed by Dr. Abel appears to be. The importance of this point is, that the sand-stones of Europe, usually contain a large proportion of argill and lime, and consequently afford, a very different soil, to that which would be afforded by a rock, in which these ingredients scarcely exist. I shall have occasion to refer to this point again, as it is of much consequence to determine as near as we can the exact nature of the soil in which the tea grows.

Having endeavoured to render, as definite as possible, the various accounts we possess respecting the climate, and structure of the tea districts, the next object is, to point out such localities in the Company's territories as may bear the closest resemblance to them. With this view the hill provinces, lying on the western frontier of Nepal are for many reasons, first presented to our notice, and it is probable that many localities in these interesting provinces might be mentioned; but I shall confine my remarks to that portion of Kumaon with which I am particularly acquainted, namely the eastern frontier, from Burmdeo pass lat. 29° N. long. 79° 50′ E. to about lat. 29° 45′ N. and twenty miles from east to west.

Having been privately engaged for the last two years, in preparing a historical account of the mineral productions of this tract of country, I can speak of its geological structure and climate with confidence; but my knowledge of other portions of the province is too limited, to enable me to say

whether a better locality might not be selected, for the objects contemplated, and examinations extended half a degree further north, might be advantageous.

2. The highest elevations within the above described limits, are about eight thousand feet; and the great river vallies which form the lowest portion of the district, are about fifteen hundred feet above the sea, making the difference, between the highest and the lowest altitudes, about six thousand five hundred feet. The lowest inhabited places are about two thousand, and the highest six thousand feet above the sea. The river vallies are narrow and crooked; the streams usnally descend during the dry weather at the rate of four miles an hour, but during the rains their velocity is increased to six or seven miles an hour. In some of the more open vallies the banks of the rivers are formed of low platforms of rich alluvial soil, many of these being liable to occasional inundations are left uncultivated.

3. With respect to temperature it is extremely variable, and is with great difficulty estimated, on any fixed principles dependent on latitude, and altitude, but is in a great degree modified according to particular localities. The thermometer may stand 25° higher on a southern than it does on a northern aspect, nor is this occasioned altogether by the difference between the temperature of the general air, and of the rays of the sun, but by the evaporation of moisture from northern acclivities, while southern acclivities being often more sheltered from the winds, the heat is accumulated on them to a very great degree; that heat is also modified by particular winds, the following experiments will shew—22d March 10 A. M. Thermometer 62° in the shade; light winds from N. W. thermometer removed to the direct rays of the sun in the open air, rose immediately to 85°, and continued rising till 12 A. M. when it stood at 99°. It was then returned to the shade but still exposed to free air when in half an hour it fell to 66°. 2d experiment 25th March, wind; south 10 A. M. thermometer in the shade 65° it was removed to the direct rays of the sun, when it rose very slowly, and at 12 A. M. it stood at 85°; at this time the wind changed suddenly from south to N. W., and the thermometer rose to 97° in ten minutes from the time the wind changed; at this time the weather was dry, but unsettled. It may be necessary, to refer to these experiments again, when speaking of the qualities of the winds—I may finish the subject of temperature by referring you to an abstract of meteorological observations from 1st May 1830, to 30th April 1831, made at this place by my predecessor Dr. A. K. Lindesay (Calcutta Med. & Phys. Trans. vol. 6.) For the deeper vallies I may remark that the temperature, during the months of June and July, is usually 100° in mid-day and never less than 80° at any season.

4. Frost begins to appear about the end of October; and at the end of November the ponds are usually frozen, and snow falls between that and the end of December. In January, the lowest temperature observed was 26° the highest 53° Fahr. About the end of Febrnary, frost begins to disappear, but the weather sometimes continues excessively cold till the end of March. On the 25 and 28 March 1832, heavy falls of snow took place at Lohooghaut.

Snow remains during the whole cold season, (viz. from November till March) on the nothern acclivities of the mountains. Its lowest limit for this length of time, is about 6,500 ft. above the Sea; but on the highest summits, it seldom remains longer than a few weeks, when exposed to a southern aspect. At Lohooghaut, which is elevated 5,800 ft, and situated on a southern acclivity, snow remains for weeks on shaded places; such as the rear of houses, in ditches, and on northern declivities. Upon the whole, the seasons are very variable; and during the winter of 1832 and 1833, no snow fell at Lohooghaut. The natives observe, that mild winters recur every three years.

5. The seasons, with respect to rain, are variable. According to Dr. Lindesay's observations; from May 1830, till May 1831, there have been 136 days rain: and according to my memoranda, from April 1833, to April 1834, rain has only fallen on 82 days. The following table exhibits the contrast of the different months during the above periods; but not having kept a register of the weather, the part of the table relating to my own observations is to be received with some limitation, as it is merely taken from notes of the weather, made from time to time: it may however be received as generally correct. As I have not kept a rain gage; I regret, I cannot make this part of the subject more valuable: but if I might venture an opinion, I should say, the quantity of rain, which falls annually is equal at least to that which falls in the plains of upper India, with the only difference that it is here more equally diffused throughout the different seasons.

1830.	days.	
—— May rain	12	——
—— June..... ..	22	——
—— July..... ..	29	——
—— August	25	——
—— September	21	——
—— October	0	——
—— November	0	——

1830.		days.
——	December	0 ——
1831	January	0 ——
——	February.....	28 ——
——	March	9 ——
——	April occasional showers	——
1833	April rain	2 ——
——	May.....	1 ——
——	June.....	0 ——
——	July.....	15 ——
——	August.....	26 ——
——	September.....	10 ——
——	October.....	0 ——
——	November.....	5 ——
——	December.....	8 ——
1834	January.....	3 ——
——	February.....	8 ——
——	March.....	4 ——

6. During the cold season the atmosphere is transparent as is well exemplified, by the great distance at which objects are distinctly observable from elevated places. This is probably the consequence of the diminished influence of the sun, in promoting evaporation, as few diurnal changes, take place in the atmosphere till the month of April; when the snowy peaks, so distinctly seen at all hours of the day, during the cold season, now become obscured by clouds about noon. This effect encreases as the weather becomes warmer, till at length, objects become invisible, at the distance of little more than a mile. This extreme opacity of the atmosphere is fortunately rare, as it is considered the harbinger of bad crops, as well as of much sickness. It was particularly remarkable during the months of May and June 1833, a year so disastrous from the failure of the crops, throughout India; during the months in question, the wind blew from the west accompanied by a dry-mist; no dew fell during its continuance, evaporation was accelerated, the skin became parched, the sun was much obscured, and sickness prevailed to a great extent among the native population. The mist was supposed by the natives, to be the consequence of the winds, but it was, most likely occasioned by an electric condition of the atmosphere, arising from excessive drouth, and heat. The ensuing rains were preceded by some heavy showers of hail accompanied by thunder. The usual state of the atmosphere during the months of May and June is hot, and moist. According to the best observations, I have been enabled to make with the hygrometers, the moisture of the air varies from 4 to 8 grains in the cubit foot, except during the hot season of 1833, when the quantity of moisture must have been very small indeed in the lower strata of the atmosphere.

According to M. Saussure, the quantity of moisture contained in air saturated to precipitation is 2 grains to the cubic foot, when at freezing point; and encreases with the temperature; so that it is 8 grains, to the cubic foot of air when it rains at 68° Fahr.; which it must do when it rains in the hot season: except indeed, that the precipitation be occasioned by the admixture of airs of different temperatures; as is probably the case, when it rains in the hot weather in Kumaon. In July, August, and September, the atmosphere is rather sultry, and cloudy. In October it becomes clear, and settled.

Fogs are not peculiar to any season; but constantly succeed to heavy falls of rain; they seldom continue longer than a few days in high places; but they remain much longer in vallies; and in deep uncultivated ravines, they recur every morning from sun rise till nine or ten A. M. for a month or two, after the periodical rains have ceased.

7. Situated in the 30° of latitude; this district can hardly be considered, as subject either to the monsoons of Bengal, or to the westerly winds of those latitudes, which lie between the 30° and 40°: but it partakes of the influence of both; somewhat modified, by the vicinity of the Himalayas. There is notwithstanding, a good deal of regularity here in the winds. Thus, from October until March: north, and north-west winds may be said to prevail: in March or April these winds pass by west to south; and from April to October, they usually make diurnal changes from south to west. The northerly wind which prevails in the cold season is attended with a clear, dry atmosphere, and its velocity is seldom great. This wind is usually attended with frost; and the atmosphere during its continuance loses much of its property of conducting heat; as is partly proved by the experiments with the thermometer already mentioned; by which it appears that the direct rays of the sun, are transmitted at a temperature, which exceeds that of the surrounding medium in the proportion of 1,469 to 1,000; while during the south wind, the difference is only 1,308 to 1,000. The affinity of the atmosphere for radiated heat during the prevalence of these winds may be considered to hold the same proportions.

The west winds are usually dry and warm, attended with a hazy state of the atmosphere: the velocity of these winds during the months of March and April is greater than that of any other, but they are seldom stormy.

Slight hurricanes sometimes take place, but not oftener than once; or perhaps twice a year; the period at which they

occur, is between April and July: but they seldom last above half an hour, and their course is generally from north to south. I have never known any serious injury to result from them.

8. Thunder storms are not very frequent, and seldom occur oftener than three or four times a year. A severe storm usually takes place in the hot season.

9. Hail storms are not more frequent than those of thunder. I have only witnessed two severe ones during the last two years. One took place in June, and the other in March, but neither of them were such as to cause any injury to agriculturists.

10. The common migratory locust—Gryllus migratorius of Linnæus, has passed three or four times over the district within the last two years. The first flight was immediately after the cessation of the rains in 1832; and such were their numbers, that although their velocity was very great, they were nearly two hours in passing over the cantonments of Lohooghaut, where they arrived, about six hours after they had passed over the valley of Shore: and as these places are 30 miles, the rate at which the locusts travelled may be estimated at four miles an hour: for although the direct distance is only 15 miles, their course was intercepted by two lofty ridges. Numbers of them fell from exhaustion and died, but the main body made no halt; a few weeks after the first, a second flight passed in the same direction. In 1833, also after the rainy season two small flights passed in the direction of the former ones, and one of these were forced, from bad weather to take shelter in a grove of pine trees, in which they nearly all died without having done the slightest injury. This climate appears to be too unfavourable to these vermin, to cause much apprehension from their devastations, nor is it probable their brood would survive the severity of the cold season.

An insect which occasions some injury to the foliage of certain plants is the cock-chaffer or scarabœus melolontha. This insect made its appearance at Lohooghaut, in the latter end of June 1833, in the apricot trees, after the fruit had been gathered. Every portion of the foilage of these trees was rapidly devoured. The next objects of their choice were the cherry trees: then the plum trees; but fortunately, before their devastations were extended further, these destructive insects were themselves destroyed by the rains. Their appearance however is unusual, and on this occasion was no doubt, the consequence of the long drouth. The coccinella, or lady-bird is destructive to peach trees, but the injury occasioned by this insect s confined to particular gardens.

11. Geology, and soils. Without entering minutely into this subject, I shall state briefly, a few of the general characters by which agriculture is likely to be influenced. With this view, the district may be divided into a number of sections, according to the chemical, and physical characters of the rocks of which it is composed. It is necessary that both these characters should have due weight, as two rocks may be composed, of similar chemical constituents, and yet be very different in their physical characters; as quartz and potstone, trap and clay-slate, charcoal and the diamond. Those rocks only which are easily acted upon, by such external agents as abound in the atmosphere, are interesting in an agricultural point of view.

a. Granite and Gneiss Section.—This extends from the Gogra river in a W. N. W. direction, and passes south of Almorah. The rocks composing this section form elevated ridges intersected in all directions, by vallies and ravines. The granite and gneiss form a dry white sandy soil which is composed of pure silex; on the surface of this, is generally a slight accumulation of vegetable mould.

b. Calcareous grit-stone and a sandy kind of slate-clay.—These rocks lie at the base of the granite and gneiss, next the plains; and constitute the only formation of any consequence to our present purpose in that direction. They form a small mountain-group of an altitude of about 4,000 ft. which is overrun with dense forests. The soil is rich, of a light gray colour; and is composed of argill and lime.

c. Clay-Slate—lies on the N. E. side of the granite and gneiss, and composes an extensive section of the district of various altitudes, from seven to two thousand feet above the Sea. It affords a reddish yellow soil, which is composed of argill, silex, and oxide of iron. It is poor, but with lime might be rendered a rich soil. Along the centre of the clay-slate district, there is a rock which I have called Stealiteic sand-stone. It forms a belt of mountain caps about two miles broad. This rock when it occurs fresh, might be taken for a serpentine; but it is much harder and heavier than any of that family. When weathered, it loses its compact appearance, and assumes the characters of a siliceous* sand-stone and resists

* Note. Is this the sand-stone mentioned by Dr. Abel.

very powerfully, all further destruction from the atmosphere. It therefore affords little alluvial soil; but as it occurs along with clay-slate, there is a light, stony kind of earth formed, which partakes of the nature of both these rocks.

d. Nap section.—This is composed of hornblende-slate which like most rocks of the Nap family, affords very little alluvial earth as it resists with great tenacity the action of the atmosphere. This rock is merely covered by a thin deposit of vegetable mould.

e. Calcareous section.—This is composed of various compact, and fine grained lime-stones which repose on clay-slate. The mixture of calcareous and argillaceous earths furnished by this combination of rocks, forms the richest portion of the province. The oxides of iron which are so often present in the soil furnished from clay-state, are here decomposed by lime; and as this chemical process is performed naturally, the land requires little labour.

12. The Ramessa river may be considered as the common receptacle of most of the superfluous waters of the northern side of Kumaon. It is composed of the Surjee, Ramgungah, and Ponar rivers. By analysis of the water of the Ramessa river I found it to contain alkaline salts about 30 grains to a gallon, and a portion of lime, so small as not to deserve notice in this place. The analysis was made in April, so that it is probable the quantity of saline matter would be more, towards the end of the dry weather, at the time water would be most required for irrigation; but the quantity of saline ingredients, contained at any time in this water, is so small, that even if they were of a noxious nature, they could scarcely render the water objectionable. Another river whose waters I have also analysed passes close to Lohooghaut, and rises partly, in the granite and gneiss district, and partly in clay-slate. This water contains eight grains of alkaline salts to the gallon and about twenty grains of sulphate of alumina. A third river, the water of which I have examined, is that which drains the valley of Kalee Kumaon. In this water, I found about thirty grains of alkaline salts to the gallon, and no alumina or lime. It is probable that the alkaline salts contained in these waters are derived at this season of the year from the practice of burning the dried vegetable clothing of the mountains.

I am at present engaged in an extensive, examination of the waters of the district and should any thing transpire, that may be likely to prove of further interest to your readers, or the Tea Commitee, I shall lose no time in making it known.

13. Oaks flourish in all the most elevated ridges and vallies but they become stunted at 6,000, and are not found below 5,000 feet. Pines grow in great perfection between the altitudes of 3,000 and 6,000 f. In the lowest vallies we have most of the plants of Hindoostan.

The plants which are here cultivated agriculturally, are Peas of various kinds, Wheat, Barley, and Rice, Sugar-cane, Tobacco, Ginger, and most of the plants which are cultivated in Hindoostan, as well as most of the European vegetables.

The fruits which come to perfection are Plums, Walnuts, Oranges, Plantains, Peaches, Apricots, Apples, and Strawberries. Bird cherries of a fine flavour, but small sized, grow wild throughout the district, as well as Raspberries.

14. The ordinary wages of labourers are very low among the natives themselves; perhaps not more than a rupee a month. Europeans according to the rates fixed by the commissioner, ought to pay three rupees; but the fact is, natives themselves are quite content with two rupees a month for light work: and I think that for that sum any number of *free* labourers might be procured. Women and children might be had for less; but it is at the same time probable that men might require a little more for heavy work, and upon the whole, I think two rupees a month might be considered as the average rate of hire, but on this point the civil officers of the district could give the most correct information. One thing however should as much as possible be avoided, that is compulsory labour; I have noticed the bad effects of such a system in another place.

15. The salubrity of the climate generally is very great; both as respects natives and foreigners. However, remittent and intermittent Fevers prevail in certain parts of the district, and in vallies during the hot season, and in the months of August and September.

16. The only means of transport is by coolies, but mules or bullocks might be advantageously substituted as was formerly the case when grain was sent up from the plains by the commissariat for the use of the troops. A cooly carries 30 seers weight, and his hire from Lohooghaut to Burmdeo-Pass—a distance of 30 miles is 13 annas—from Lohooghaut to Petorahgurh also 30 miles, 10 annas. From Burmdeo-Pass goods are readily conveyed on Hackeries to Peeleabit, and from thence may be transmitted by water without going to Barelly.

Should commerce be established in this part of the hills: land carriage might be saved even to Peeleabit by opening the navigation of the Gogra to Burmdeo-Pass. The breadth of the river where it emerges from the mountains is about 180 yards, and its depth in dry weather seven or eight feet; and from the base of the mountains at Burmdeo, the current is very inconsiderable.

REMARKS.

Should the Committee determine on making experiments on the cultivation of the Tea plant in Kumaon, much will depend on the selection of particular localities on which to establish plantations. I say plantations, for perhaps the most judicious way will be at first, to try the plant in numerous places at different altitudes throughout the district, with a view to determine in which place the plant is most likely to succeed. In each of these little plantations different modes of horticulture might be adopted with respect to individual plants in order to ascertain the one most likely to answer.

I have the honor to be,
Your most obdt. Servant,
JOHN McCLELLAND.
Assistant Surgeon, 30th Regt. N. I.

P. S. The saline contents of the waters mentioned are over-rated, no deduction having been made for the water of crystallization.

J. McCLELLAND.

THE MEDICAL PROFESSORS OF THE UNIVERSITY OF GLASGOW—NO. II.—DR. BADHAM.

First time I had the pleasure of seeing Dr. Badham, it was in his own house away beyond Blythswood-square, on a sunshine meridian of November; when my Chum and I went to fee his classes, the theory, and the practice of medicine. I thought him the most affable the most condescending, the most polite, the most courteous, the most prepossessing, friendly, obliging gentleman, I have ever had the good fortune to meet with; and had I never met with him again, I might even to this day, (notwithstanding of my friend's caustic observation after our visit) have contemplated his character through the same coloured media, and remained in ignorance of having been flattered and cajoled, and had an anxious concern expressed for my interest and improvement, for no reason that I have since been able to perceive, than the pocketing of a couple of fees. Far be it from me to find fault with the doctor's graceful, and *kooch purvane* manipulations, in crumpling up the pieces of dirty paper, and stuffing them out of sight into his waistcoat pocket. No! I would willingly put the same sum into his hands again, for the pleasure of such an interview; provided I was certain that his courteousness, and expression of friendship and interest, were sincere and disinterested: for such is the perversity of our nature, that we would rather have our feelings ruffled by apathy, or even churlishness, than imposed upon by professions that are never intended to be fulfilled. But the doctor was quite a man of the world: had travelled the grand tour more than once or twice: had played his part in the halls of the Nobility, and the courts of Princes, and studied the art of pleasing in the palaces of continental Europe: being in most a mere bird of passage, had perhaps bestowed more care upon those qualifications which please and fascinate in a transient interview, than in cultivating the more intrinsic principles of our nature, or the more substantial and more endearing acquirements of familiar intercourse and settled society.

Dr. Badham was a man rather below the middle size than above it; with a large portion of his well chisselled forehead laid bare: an eye well charged with living fire; and an eyebrow, though by nature intended to frown, by custom constrained, (for the constraints were still apparent) into a habitual smile. The other parts of his Physiognomy, though they would not have been selected by a Phidias, or a Praxitiles as models for a Belvidere, were more intellectual than beautiful; with a broad dash of the Hippocratical throughout, and in good keeping with a professor of medicine. His limbs were well turned and stoutly made, and to shew them to the full advantage, he wore black tights tied at the ankle, black silk socks and pumps. But the green groves and balmy breezes of Spain, of France, and Italy, seemed for him to have no antidote for grey hairs; the galleries of Dresden and Florence no prophylactic for decay of vision; and a life of variety, of ease and enjoyment, no protection against the furrows of time.

There was a considerable clamour about Dr. Badham's being appointed to the Medical Chair of Glasgow; not that he was an Englishman, a Graduate of Oxford, and of course belonged to the English Church: for though an understanding and perhaps a law had long existed, that no individual should be elected to a Chair, unless he belonged to the Church of Scotland, yet that objection had a few years before been set aside in the appointment to the Greek

Chair. The idea of a Court Physician being successful whose name was unknown in the world, was not at all agreeable, while so many others of the most distinguished talents, and highest celebrity, were candidates, and overlooked. The result was a presumption that the Chair was not given him for any professional eminence, or for celebrity in any collateral science; but as a matter of convenience, in disposing of his services when no longer required, or as a provision in his advancing years for services formerly conferred. Hence a prejudice existed against him without his having been seen or heard: he was pushed into a seat for whose duties at the time he was quite unprepared; and called upon to deliver a course of lectures immediately, on subjects that had occupied little or perhaps none of his attention unless casually in family practice, since he himself was a student.

He had no stock of lectures ready made to assist him, and the quantity of original material was more by an immense deal than any one man could supply. In fact he was like a father in the midst of a numerous adopted family, dependent upon him for support and existence. He toiled hard by day light and gas light, to make up a meal for the following morning; but with all his exertions, when the hour came, the platter was still unfilled. To buy he was unable, to beg ashamed; and unless he allowed his dependents to starve, to borrow, or even to steal, was his only alternative. Yet with all the sweat of his brow, his borrowing and his *helping himself*, his students often came hungry away and unsatisfied, and were apt to complain that the fare set before them had too much leaven in it, was indeed a mere sponge cake, very gratifying to look at, but sadly deficient in solid material to satisfy a keen appetite; that he wasted his time upon crust-work and garnishing, instead of upon the principal substance; and instead of expending his means upon animal and vegetable substantiality, he was so improvident, so inconsiderate, as to serve up to them apricot jellies, and Hessian ragouts. Eau de milles fleurs, and Jerusalem artichokes.

Again he had no regular system of Nosology of his own; indeed none could with so little time for preparation be expected; but what was less accountable, he did not think fit to follow up the course of any other. Like a bee in a botanical garden flitting and humming about from tree to tree, from plant to plant and from flower to flower, indiscriminately; inhaling the perfumes of a bank of violets, loading himself with the aromatic farina of a bed of auriculas, or with uncoiled proboscis extracting the liquid sweets from the conchoid nectaria of a wreath of woodbine, all regardless of their scientific arrangement into class, order, genus, and species; so in like manner did Dr. B. buzz about from one disease to another, and with nearly as little regard to their Nosological orders; and though he touched upon many, it was merely to taste their sweets without the alloy of their bitters, or to make a pleasant extract, without the drudgery of analyzing their substance: so that before the close of the session, he frequently reverted to the same subject he had before gone over in a cursory manner, for the want of fresh material.

He may be said to have thus entered upon the voyage of the session without chart or compass: he took his departure from no Lands End or Lizard: made no observations solar or lunar: and summed up no dead reckoning. He had no desired object in the distance to fix his eye upon, and to which to steer; no remembrance of any consecutive landmarks to satisfy himself occasionally that he was upon the regular course: he launched out into the open ocean of Medicine under the first favouring breeze, and dodged along, always before the wind, to all the points of the horizon. When the voyage ought to have been completed he found himself only half way to his destined harbour, though once or twice he had been within two or three days sail of it. He had broached every hamper of provisions; exhausted his oilman's stores, and opened every cask of water; some of which indeed, he had quite consumed, but the greater number, he broached out of mere curiosity, or for the sake of variety: so that all hands on board, were reduced to living upon putrid ullaged and decomposed fare, and the crumbs the crusts and the parings of former banquets.

Nevertheless his lectures with all the haste, and crudeness, and mutilation, and want of arrangement with which they were patched and stitched together, were on making proper allowances, highly praiseworthy. In chasteness of composition, in variety and elegance of tropes and figures, in originality of thought and expression, and exuberance of quotations from the Greek, and Latin, and French, and German, and Italian, delivered with such ease and animation withall, and with such feeling and pathos, they certainly outrivalled any thing within the walls of the University.

Withal he was by no means a popular lecturer, and why? Because he filled the chair of the Great Cullen. Had he been seated upon a tripod of Belles-lettres, his class-room would have been crowded to

excess: every one would have listened to him as an Oracle with rapture and enthusiasm, and he might have waved his wand and transformed their minds according to his will and pleasure.

But comfit and jellies, and salt and savouring, will of themselves no more support the corporeal frame, than similes metaphors and allegories would the intellectual. A student of medicine having laid the groundwork of his profession, having spent two seasons in learning to know how very little he really did know, and eager to be instructed in the doctrines of fever and inflammation, was not likely to be satisfied with a flowery though elegant discussion upon the colour and radiance of the hair of Apollo, or the length and venerability (pardon the word) of the beard of Aesculapius; or when he sat down with his note-book before him, and one or two, or perhaps three pencils ready cut and pointed, to transcribe the learned Professor's analysis of contagion or paralysis, to profit by nothing but a Greek epitaph upon Machaon or Hippocrates, an apostrophe to the shade of Galen, or a personification of the pestilence that desolated the Camp of the Assyrians.

As might have been expected his health was disordered by incessant application, he had frequent holidays, and being in general able to deliver his lectures much within the hour, he seldom appeared till the first quarter was over; and by the time that he had stirred up the fire, hung up his hat, drawn forward his chair, wiped his spectacles, adjusted his neck-cloth, arranged his manuscript leaves, and by frequent intonations brought his voice to the proper pitch of point blank delivery, the first half hour was well nigh spent. The consequence was that his class year after year dwindled away: the lectures of the Andersonian Institution were more frequented, and few remained but those who were obliged to attend in order to qualify them for taking a University degree. The Doctor on his part became offended at this tergiversation, thought his misdirected talents thrown away upon a handful of hearers, and without much scruple gave vent to his independence and contempt, by a sneer or a sarcasm. Whether he thought that he did not receive from the rest of his colleagues the proper degree of respect he fancied himself entitled to, or considered himself humbled in being associated with the herd of Scotch Professors (for he had a mortal antipathy to every thing Scotch) might be somewhat doubtful: but he maintained but little intercourse with his brethren of the gown, and lived retired in domestic quiet.

It is to be hoped that Dr. Badham with the talents he undoubtedly possesses, with so much room for modulation and improvement and so many years of experience, has attained that degree of popularity of which he is deserving, and is now lecturing regularly to a crowded, satisfied, admiring class, and meting out a moderate supply of medical lore. It is also to be hoped that he has become reconciled to such an infernal region as he at first was inclined to believe the good city of Glasgow to be, and that though he was pleased to think it a "hell" in comparison with such a "heaven" as his beloved London, that he has contrived to live not such a bad life after all, that with all his prejudice and dread of innovation he has found something else to subsist upon than *Cauld Kail* and Atholl brose and Bannocks of barley meal. That Scottish luxuries are not confined to a straw built sheeling, a bed of heather, a tartan plaid and a *quaigh* of mountain dew; and that when his stores of Mocha and Bohea and Barbadoes, were consumed, he did not find it necessary to replenish his shelves from the banks of the Thames.

KIRKMICHAEL.

10*th December*, 1834.

APOPLEXY AT CHUNAR.

To the Editors of the India Journal of Medical Science.

Gentlemen,—In the hot season of 1833 many of the Europeans here died suddenly, I sent a series of cases to the Medical and Physical Society, and my paper was published in their transactions (vol. vii.) I have been disappointed that no abler pen has taken up this subject, and as the hot weather again approaches, this disease (be it what it may) which kills so surely and so suddenly, begins to force itself on my meditations. I therefore take the liberty of sending a few more cases with some remarks, and I shall anxiously look forward to your editorial comments for some information regarding this malady, which I have formerly called apoplexy, but I now hesitate to give it a name, tho' in the paucity of light on the nature of the disease I append as a note* an extract of a letter from a

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* Extract of a letter from Supg. Surgeon Reddie, dated Cawnpore June 29, 1823.

"This violent set of symptoms has got the name of apoplexia (tremulenta?) carditis gastritis and *(remedial)* fever, that is if not strangled as apoplexy it will grow into a fever "etiam in Hippocrati notatum fuit, summam ebrietatem sequi obmutescentiam et lethalem quandoque apoplexiam, nisi febris orta remedia fuerit. The gastritic cases had erythema over the whole internal coat instead

much lamented friend, had he been more full, the extract would have possessed much more interest for there were few men whose opinions were entitled to so much weight, I may be wrong in thus using a private letter, but his name (clarum et venerabile nomen!) shall be my excuse—Dr. George Reddie—all who knew him and who may read this, will need no apology for a few words of digression at the mention of this highly accomplished and amiable man.—

To resume—the train of symptoms no doubt much resembles that of an apoplectic seizure, but the post mortem appearances far more resemble those found after death in the asphyxia from noxious gases, drowning, hanging, or death by lightning; in all the dead here, the skin was purple, and this often appeared before death, and the right side of the heart, as well as the venous trunks, was gorged with dark fluid blood. Coup de soleil may be vague enough and therefore convenient as involving no theory, though it's exact propriety may be questioned for in one of the fatal* cases published the man had been 32 days in Hospital, and many died who were but little exposed to the sun.

This frequency of sudden death prevails in many parts of Upper India usually only during the few intensely hot days that precede the first fall of rain; it is known in Bundelkund by the name of "Loo" or "Looh" which literally means "a hot blast," clearly implying an opinion that the fiery heat of the inspired air is the cause of death; many cases occurred among the natives here during 1833, and I made it my business to enquire from the learned among them how they treated the premonitory symptoms, I was told that the proper remedies were mint, goojratee cardamoms, and Lahore salt!†

Had I access to a large library I should consult the Abyssinian Bruce on the death blast from the Simoon, and the French authors who were in the Syrian expedition when their future Emperor was repulsed from Acre; but as I have no such works I shall proceed with the cases, trusting that the communication may elicit such noticeas may give me some confidence of a happier result than I have ever yet witnessed when I next see this formidable disease.

Case I.—Bombardier Jones, Æt 46, and 24 years in India, (July 10, 1833.)—A robust, steady man, but who has lately been drinking as his comrades say "off and on for six days, and hard for two;" he is reported to have complained of feeling unwell yesterday, he was found insensible at 2 A. M. and by the time he reached the Hospital he was dead.

Inspected at 6 A. M. Body fat, mottled with blue. Much blood flowed from the scalp, and the vessels of the dura mater were greatly loaded, the arachnoid was semi-opake and covered a large accumulation of serum, no excess of bleeding points of brain, nor was the fluid of the ventricles very abundant, the arteries of tuber annulare minutely injected, right choroid plexus contained a few gelatinous granules, and the velum was much injected where it joins the pia mater of the crura cerebelli and tuber annulare. A small excess of fluid in pericardium, slight traces of recent increased action on the surface of the heart, the ascending aorta had several ecchymosed spots, and the vasa vasorum were injected, no cartilaginous deposit, no disease of structure of the heart, right side full of dark fluid blood; lungs very healthy. The rugæ of the mucous membrane of the stomach towards the cardia were red at their prominent margins, the intervening hollows being naturally pale, a few scattered specks of vascularity near pylorus. Other viscera healthy.

Case II.—Serjeant S. Hurst, Æt 48, (May 25, 1834.)—A very steady, robust man, has lately lost his wife and has tippled a little, at least he says so, though his comrades say that he has not been drinking, but that he wanders in his conversation and has for days complained of being out of sorts; he has been in Hospital for a few days and by a small bleeding, laxatives and shaving the head, he appeared rapidly regaining composure and health, when suddenly yesterday, after the evening visit, he became incoherent and gradually lapsed into coma. Cold was applied to head, mustard pediluvia used, hot salt rubbed over surface, an enema administered and 10 grs. of calomel to-day P. regular, soft has constant muscular twitchesc oma not complete, for on being loudly addressed, he held out his hand and smiled, no stool has followed a second enema, a third with five drops of croton oil brought away no feces, a caustic blister was applied over scalp, sinapisms to legs and over the heart, and 15 drops of

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of patches as usual, the carditis showed some singular appearances in the cavities of the ventricles and aorta. Nearly all were drunken and gorged with animal food; violent exercise and exposure to the sun, fill the cup of evil. Time allows little remedy being employed they are gone after the first bleeding."

* Trans. Med. and Phys. Soc. vol. vii. Part I p. 94.

† I almost repent having thus sneered at the native practice, inert though it be, when I reflect how unsuccessful my own has been.

croton oil rubbed over abdomen—a catheter was also passed—he however sank at 11 A. M. about 15 hours after commencement of coma. Inspected at 6 P. M. Surface livid, body fat, as usual the morbid appearances were unsatisfactory, brain firm, few bleeding points, there were a few well marked veins on the inner surface of the lateral ventricles, no material excess of fluids, a few patches of opacity on arachnoid, and the velum interpositum was red and thick, having probably been the seat of slight increased action. Other organs appeared healthy, but from excess of fat semi-fluid from the intense heat of the weather, they were not minutely examined, the heart adhered at some points to the pericardium (from former disease clearly,) right auricle and ventricle distended by dark fluid blood, which abounded in all the central organs.

CASE III.—(May 26, 1834.)—(Weather fiery, thermometer at 2 P. M. in the shade 114°.) Private J. Reilly, Æt 46, 19 years in India brought in dead about 3½ P. M. his companions stated at the Inquest assembled, that he with some others walked to the grog-shop (about 1½ mile) between 10 and 11 A. M., that after tippling for more than an hour under a tree, during which time the deceased may have drank two quarts of toddy, he complained of feeling ill, was suddenly seized with stupor, foamed at the mouth, became black (livid?) and died in ten minutes.

Inspected at 6½ P. M. Surface livid, no mark of violence, scalp bled much during preparatory dissection, the outer coverings of the skull much injected with blood (uniformly so, not in echymosed spots as after blows,) brain not congested, indeed rather pale, a little serum under arachnoid, a few branches of full veins in floors of ventricles, but nothing that might not have been observed in one who had died from disease unconnected with the head. Right side of heart distended with dark fluid blood, which welled out on cutting the auricle, generally the central viscera were full of blood. The stomach distended by food and toddy, and all the intestines, especially the colon, excessively distended by flatus.

CASE IV.—(May 29, 1834.)—Gunner Stein, æt 35, 18 years in India, a hale, soldier-like man, has been drinking much toddy since the heats commenced, to-day after breakfast walked several miles for a fresh supply, and is said to have felt faint during his walk under the burning sun, after he returned he is said to have drank about two gallons! and about 3 P. M. was seized with the prevailing apoplexy—attended with perfect coma and excessive tremulous agitation of the whole body—the stomach pump used to clear the stomach, and strong enemata with croton oil to relieve the tense abdomen, both acted well, the head was shaved, cold applied, sinapisms and pediluvia to feet and legs, and frictions to surface, but the coma, stertor, convulsed movements with closed pupils continued unmitigated, and although too well aware how ill such patients can bear bleeding, I opened a vein, but the pulse faltered so as to threaten immediate dissolution after 10 oz. were drawn, he survived the attack about five hours.

Inspected about 11 hours after death. Body livid, scalp and interior of skull vascular in every part, membranes minutely injected with bright red blood, a few specks of coagulable lymph at several points, this acute meningitis pervaded the whole upper surface of the brain, descended to the corpus callosum, and tuber, the choroid plexus and velum partook of the inflammation, but the cerebellum and most of the base were free from it; some bloody serum in the base of the skull, and pink liquid in the ventricles; in short meningeal apoplexy clearly developed, in this differing from the other cases. Viscera of thorax and abdomen remarkably healthy and the accumulation of dark blood in the right side of the heart and venous trunks did not exist here.

CASE V.—(June 5, 1834.)—Sergeant J. Best, æt 42, and 16 years in India, a steady, respectable man, not robust, and has suffered from a slight paralytic attack three years ago, was lately in Hospital with the epidemic bronchitis since which has not regained his strength: three days ago his wife begged of me to see him in his quarters; he was weak, thirsty, with slight febricula, and had several times fainted on moving, he is not epileptic; these faintings began some days previous after bathing while hot, he was recommended laxatives and abstinence and to come to Hospital if not soon better.

5 P. M. Just admitted, having had several fits resembling epilepsy during the day with cramps, for which he has taken some *brandy*, an enema has fully relieved his bowels; he is now quite rational, though he says that he feels confused, and articulates with difficulty, slight diminution of power of right side, puts out tongue straight, though it is tremulous and white, moans though he has no specific pain, circulation not excited, prickly heat not repelled—the head shaved, cold applied, and sinapisms to legs, cupping to neck, and enema repeated:—8 oz. of blood by cup-

ping decidedly lowered the pulse but did not relieve the malaise, indeed coma almost immediately approached, scalp hot, cold lotions freely applied, no effect from enema —deglutition difficult—in half an hour he was dead.

Inspected at 5½ A. M. 11 hours after death. Livid, scalp not injected, substance of brain natural, a small quantity of reddish serum in base of skull, none under arachnoid, the latter membrane in some places milky, ventricles had scarcely an appreciable excess of fluid, congestion of mesentery of choroid plexus, which was thick and matted to the root of the medulla oblongata, congestion around circle of Willis which extended a little way along the course of the right anterior cerebral artery, no other part inspected as the funeral party was waiting though I have no doubt that the venous system would have been found congested.

CASE VI.—(Sept. 4, 1834.)—G. Walker, Drummer, æt 38, a native of India, admitted four days ago after 15 day's drinking—tongue very foul, and nervous symptoms excessive, during the night the delirium potatorum so expressively called "horrors" came on in an aggravated form. (6 A. M.) put into the strong room with a man to watch—he continued restless, and talkative, and about 4 P. M. while talking to imaginary beings at the window he was observed to fall; coma complete, stertor, pulse soft and regular, bowels acting of themselves, abdomen full—he had a few spoonfuls of wine and water, a stimulating enema, friction to surface, shaved head, applied cold, and cupping of epigastrium—but no improvement took place and he died in four hours.

Inspected at 6 A. M. Body partially livid, skull very thick, slight general congestion of brain and membranes, but no part affected more than another, serum abundant though it could not be said to be excessive—heart gorged with dark fluid blood, some patches of false membrane on its surface, apparently the remains of long passed disease. Stomach moderately distended by flatus, no vascularity or trace of morbid action of its mucous membrane—nor any other morbid appearance.

My note book can unfortunately furnish more cases, but those above detailed seem sufficient as specimens, it is true that Nos 1 and 6 did not occur during the hot winds, but as the weather was still very warm when they occurred, I have copied them as being very nearly allied to the congestive apoplexy of the hot winds, and also I suppose that if I can in any way elucidate the subject, it must be by giving such cases as have shown some variety in the time of occurring, or in the train of symptoms,—I grieve to say there are no varieties of termination.

Before concluding, let me anticipate an opinion that I feel some will entertain of blood-letting not having been carried far enough in these cases. Both from recollecting early instructions, and from observing the congested state of important parts, I was led to bleed freely in similar cases, blood has been taken from the temporal artery, the external jugular, the arm, nay both arms—and leeches and cupping have been used, I cannot recollect ever seeing any benefit, and have often been certain that it accelerated the fatal event: the powers of life seem to have received so severe a shock at the time of the first attack, that an abstraction of the circulating fluid far short of relieving congestion is still sufficient altogether to destroy life, nay so strong is the "tendency to death," that in two instances I saw men expire, (who appeared otherwise likely to survive some hours) from merely lifting up the head and shoulders to give place for additional pillows.

About the premonitory symptoms little can be said in most cases, yet it is difficult to believe that the opalescence of the arachnoid, and the turgidity of the pia mater can arise without sub-acute meningeal inflammation having been present for some time before the last fatal seizure, in cases Nos. 2 and 4 both steady Sergeants there were slight evidences of this meningitis, in the former it seemed subdued by a bleeding and a few days Hospital treatment, in the latter I confess that the exhausted state of the patient and the fits of fainting as described to me when I saw him in barracks, led me to attribute his complaints to the debility of imperfect convalescence. In other men whose habits were less cautious cerebral symptoms were narrowly looked to during the dangerous season, and I may fairly infer that in some cases the attack of apoplexy or asphyxia was averted, when it once unequivocally took place I have never had the happiness of seeing a recovery.

During the seasons that so many deaths happened here it appeared by the news papers, that cases which I infer to have been nearly similar, occurred in considerable numbers at Masulipatam, and at some of the large station under this Presidency; when these are all taken into account, I do not think that I can be very wrong in estimating the subject as one of great interest and importance, and in again endeavouring to

call attention to it through the pages of your Journal.

I am, Gentlemen,
Yours very obediently,
A. K. LINDESAY.

Chunar, January 9, 1835.

ANOMALOUS ULCERATION OF THE FOOT—AND INJURY OF THE PENIS.

To the Editors of the India Journal of Medical Science.

Gentlemen,—Should you have a spare column at any time, and for want of better matter, would wish to fill it with the following curious case of ulceration, it is at your service.

This case will, I dare say, be recognised by two of your readers who saw it, and kindly assisted me with their opinion and advice. Some time last year a prisoner, confined for life in this Jail, complained of a small ulcer in the centre of the sole of the metatarsal half of the foot, about the size of a shilling, its edges slightly elevated above the surface, and its centre apparently of a diseased but dry cutaneous texture, without any granulation or discharge. When pared down to a level with the skin, it consisted of what appeared to be diseased white cellular substance nearly of the consistence of tallow, but without any discharge, and when the circumference of the sore had increased to more than that of a rupee, and its internal part was scooped out to about the depth of an inch (which always gave great pain) the same appearance presented itself, and an offensive ichorous discharge flowed out; as the circumference of the ulcer increased, the edges became more elevated. Nearly opposite on the Dorsum Pedis, and over the third toe, two small ulcers opened, and discharged similar matter: from examination by the probe, they appeared to communicate with the large ulcer in the sole. Escharotics, as Argent. Nit. were frequently applied when the inside was scooped out, and mercurials &c. given; but the cavity always filled up in a very short time, and the elevation and circumference of the ulcer increased. One of the gentlemen alluded to was of opinion that the third metatarsal bone was diseased, and recommended the bone to be cut down on, and if diseased to be extracted; but soon after, spontaneous exfoliation of this bone commenced and was going on when the other Gentleman saw it, who of course recommended the process to be encouraged by emollient applications, which accordingly was done; and I had hopes that in this way the disease might work itself out. However, after about half an inch of the bone was extracted from the large ulcer, the exfoliation ceased, without any abatement of the disease. As the irritation was great, but the patients constitution apparently good, I resolved on removing the diseased part of the foot as the only means of affording him relief. With the view of preserving as much as possible of the foot, and eradicating the whole of the disease, I operated immediately above the junction of the tarsus and metatarsus. He bore the operation well, and was delighted at having got rid of the source of so much pain. This took place in August last, as I was unwilling to have recourse to such a measure until every other remedy had failed.

On examining the amputated portion I found almost all the parts contained between the greater portions of the second and fourth metatarsal bones, from the dorsum pedis to the sole, converted into white or yellow matter of the same appearance and consistence as that which I have noticed in the large ulcer, which, I observed communicated with the two smaller ones. The wound healed up slowly, but without any unfavourable symptoms.

I had returned one day from attending to the above case when a faqueer was brought to me, who gave the following account of himself. Thinking that the lusts of the flesh prevented him from attaining to a higher degree of sanctity to which he aspired, he determined on mortifying them: for which purpose, on the preceding morning he laid what he considered "the offending member" on a stone, and with some sharp instrument endeavoured to cut if off and cast it from him. His attempt was followed by such a hemorrhage as caused syncope, in which state he was found by some of his neighbours. When I saw him the next day, the wound was concealed by a great clot of coagulated blood which also covered the groins and perinæum. The Penis was greatly swelled, and no urine had been passed since the previous morning; and being in great pain, he requested me, for the sake of both his soul and body to complete what he had begun; which from the probable injury of the large blood vessels, and other causes, I feared I might be compelled to do, and had every thing prepared for the amputation if necessary. I got a catheter with difficulty passed about half way down the urethra, which, when withdrawn, was followed by some coagulated blood and urine. Not wishing to disturb the injured vessels by removing the coagulated blood from be-

tween the divided parts, I bound up the Penis with lint and plasters. After a couple of days or two, on examining the parts, I found that the urine escaped from the large wound in the dorsum penis, and from another gash in the course of the urethra, which communicated freely with that canal, so that there were two passages for the urine besides the natural one. With some difficulty I got a catheter passed into the bladder, which was kept there for several days with a small cork inserted into its extremity, which the patient could remove and adjust at pleasure. When the irritation caused by the urine was thus removed, the lower wound healed in a short time by the first intention, and the upper one by suppuration and granulation, and he went away quite well. Some weeks after he returned to pay his respects, when I learned that the only inconvenience he suffered from the above misfortune was that of being cut by his Reverend brethren until such time as by giving them a "Burra Khanna" he should atone for the offence by which, as they asserted, he had disgraced his cloth.

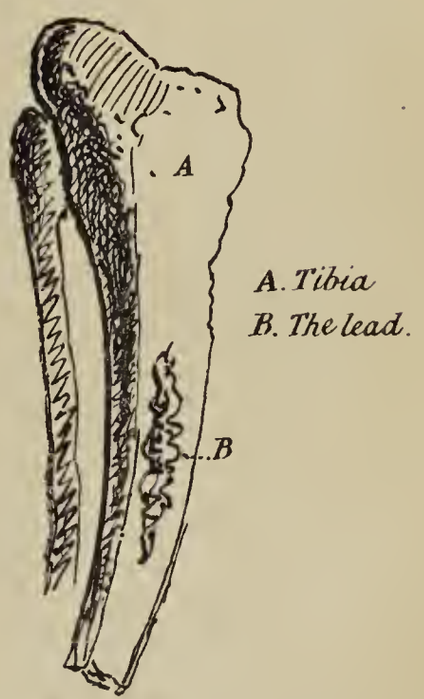
Wishing you, in your Editorial capacity, many happy returns of the approaching season,

I remain, Gentlemen,
Yours faithfully,
H. M. Galt.

Nursingpore, 16th Dec. 1834.

SINGULAR CASE OF LEAD IMBEDDED IN THE TIBIA.

Whilst I was attached to the General Hospital in Calcutta I had occasion to amputate the leg of an old soldier, in consequence of a gangrenous spreading ulcer just above the ancle. When the operation was finished we proceeded to dissect the limb in order to examine the internal condition of the diseased parts, and on extending the incision along the tibia, an irregular line of lead was discovered imbedded in the bone, with the external surface smooth. This was several inches above the ulcer with which it had no connection whatever, the bone in the intermediate space being quite sound. Upon being questioned on the subject the man recollected that he had received a wound in action, on the skin, many years before, but had suffered no inconvenience from it, as the slight laceration had speedily healed up, and had left no pain or scar to mark the place, or recall the circumstance to his mind. The quantity of led appeared to be about as much as might be contained in a musket-ball, scattered and diffused as seen in the annexed outline.



But how so singular a result could have been produced it is difficult to imagine, a ball striking the bone would in ordinary cases fracture it, but the resistance in the present instance seems to have been as great as if the lead had struck a dead wall. And it is equally difficult to conjecture how the lead could have acquired its elongated and irregular form. The bony bed in which it lay, was not in any degree exfoliated or diseased, indeed the lead had, as it were, become a part of the man, for the periosteum and skin had closed over it in perfect harmony, leaving no indication of the presence of a foreign body.

James Atkinson.

Barrackpore, Dec. 20, 1834.

ERGOT OF RYE.

To the Editors of the India Journal of Medical Science.

Gentlemen,—As the effects of Ergot of Rye from the recent introduction of the medicine into practice, must be in a great measure comparatively unknown to many practitioners in this country, I have been rather surprised that those who have had opportunities of prescribing it have not made known the result of their experience through the medium of your highly useful journal, and with this impression, and acknowledging how glad I

should have been to have had it in my power to consult the experience of others —I prescribed the medicine myself, and unhesitatingly hand for insertion in your Journal a short history of the only two cases in which I have had an opportunity of prescribing it.

The first was that of a female who, on becoming my patient, informed me that in her previous confinements, the placenta was long in being expelled, and that, on each occasion there had been considerable hemorrhage. This information made me determine on trying the Ergot of Rye should similar circumstances occur in her approaching confinement. During labour nothing of moment happened, but, though the usual degree of pressure was made on the uterus, it ceased to act for more than an hour after the birth of the infant and the discharge began to be more copious than usual. I hesitated no longer in giving a dose of 16 grains of the powdered Ergot of Rye, and in about twelve minutes after it was taken, to my joy a pain came on, and soon thereafter a second which expelled the placenta. My patient recovered rapidly.

The second was that of a delicate female, who had an abortion, in the third month of gestation some 30 hours before she reached this station. When I first saw her the hæmorrhage was very profuse, the pulse scarcely perceptible at the wrist, and the extremities excessively cold. I immediateiy gave her a large dose of laudanum in a little brandy and water, which somewhat revived her, but had little or no effect in checking the hemorrhage. She had been using cold applications for several hours. To save time, or the chance of a wrong medicine being brought, I went myself for the Ergot of Rye. On returning to her boat and finding no amendment, I gave her a dose of 20 grains of the powder; in about ten minutes it induced the muscular contractions of the uterus, but not sufficiently to check the hemorrhage, and in consequence, after waiting about ten minutes, I gave her a second dose of 20 grains. It had a speedy and decided effect, and by the time I left my patient I had the pleasure of seeing her doing well. On visiting her next morning I found her greatly better, and she progressed in her recovery, as rapidly as I could expect for the three days she remained at the Ghaut. She then expressed a strong desire to proceed on her journey, to which I reluctantly acceded, giving two doses of the Ergot of Rye 20 grains each, to be taken in the case of necessity. She had not, however been gone six hours before I received a note from her husband saying "that the discharge had returned that he had given both powders; but that both had been rejected, and that in consequence he had returned to the Ghaut." On visiting her I found her in a most dangerous state, her appearance resembled that of one in the last stage of cholera, and I confess I had no hope of her recovery. I immediately gave her 60 drops of laudanum in a little warm Port wine and water, which seemed to revive her a little and procured sleep. On awaking she expressed herself in a feeble voice, as feeling better; still, as the discharge of blood from the womb continued, I determined on giving her 20 grains of the Ergot of Rye. It lay on the stomach, checked the hemorrhage, and I did not find it necessary to repeat the medicine. She remained for five days under my care, and then proceeded on her journey, and, I have every reason to believe, has quite recovered.

J. Innes, M. D.

Bhaugulpore, 15th Jan. 1835.

MR. RALEIGH, IN REPLY TO DR. WISE.

To the Editors of the India Journal of Medical Science.

Dear Gentlemen,—That distinguished member of our profession, Sir Astley Cooper, was accustomed in the course of one of his lectures, to relate an anecdote in ridicule of a pretender to some particular science, who whenever a question was put to him on the subject he professed, would answer, "I will tell you immediately," and taking a book from his pocket, or his bookshelf, to obtain the sought for information, would, with some degree of self-importance, communicate it to his friend, as his own, but continued the worthy Baronet, "The Surgeon, should carry his knowledge in his head, not in his pocket, or on a shelf." Now being so far condescending, as to admit the probability, of most of the numerous professional readers of your journal, having made themselves acquainted with the published opinions of authors, on diseases common to the country in which they practice their profession, or at any rate, of their being as capable of reading them from original sources as myself, I shall not intrude on your valuable columns, (or on the patience of your subscribers) by transposing thereto, a long farrago of borrowed "dogmas," and hypotheses, to support a course of proceeding, which common sense dictated, professional talent sanctioned, and success, has established as justifiable.

Equally unprofitable would it be to all parties, that I should enter into discussion

with Dr. Wise, on the nature of a disease, of which, notwithstanding he has written so voluminously, his letter informs us, he has no other than a theoretical knowledge, his only opportunity of forming for himself a pathological opinion, having as I understand, been confined to my solitary case of dissection, which he inspected under such very disadvantageous circumstances, (after it had been carelessly exposed to the atmosphere in a mutilated state, for more than twenty-four hours,) that I fear he has been quite misled, as to the appearance, the morbid parts presented on dissection, instituted immediately after amputation of the limb.

Having already, in the December 1834, number, of the "*India Journal of Medical Science*," in the description of a dissection of a limb, affected with that disease, termed "Barbadoes Leg," &c., opposed an account of the same dissection, introduced by Dr. Wise of Hooghly, in his paper on "Elephantiasis," or "Phlebitis," published under the title of an "Essay," and *again* in the transactions of the Medical Society of Calcutta, it will only remain for me to show, that Dr. Wise was *mistaken* in supposing, that he had the "consent" of the person to whom the case, and "preparation belonged," for publishing the former, or disposing of the latter; and that Dr. Wise's opinion as to the impropriety of performing an operation, on a patient whom he had *never seen*, is somewhat injudicious, and gratuitous Nor do I anticipate much difficulty in effecting my object, in the mind of every fair dealing, and well informed man, by a brief review of Dr. Wise's explanation, and by a statement of *facts*, to which I now proceed, leaving your professional readers to decide, to whose anatomical description, pathological reasoning, and surgical decision, they award preference.

The subject of this leg of contention, was a *native*, (not a "weak Hindoo"—but a mussulman Lascar or Sailor) for whose admission into that half of the General Hospital under my charge I obtained permission*, in order that he should undergo an operation, which myself, and a few, not altogether incompetent judges, considered necessary, as the only chance of rescuing the patient, from speedy death.

I performed the operation, and shortly afterwards dissected the amputated extremity with some care, a description of which anotomical examination, is faithfully detailed, in No. xij, of your journal for 1834. The stump healed kindly, The patient previously reduced to a state of extreme emaciation, rapidly improved in health, and now may be seen about Calcutta, a satisfactory example of the triumph of Head knowledge, and the exercise of judgement.*

† On the day subsequent to that, on which the extremity was amputated, and dissected, The Medical Officer under whose charge, is the other equal devision of the General Hospital, came up to, and asked me, if I would allow Dr. Wise, to *look* at the excised leg, to which request, as matter of course I assented. Dr. W. with whom I had not the honor of acquaintance, came as *a visitor* to the Hospital, made his observations, the scrutinizing nature of which, I should not have anticipated, but which he has given publicity to, and was so far obliging, if I recollect rightly, as to leave the disposal of the limb, to myself. Sometime afterward, in my capacity as member of the committee of papers, of the Medical and Physical Society, in perusing Dr. Wises paper on Elephantiasis, I came upon a case of dissection, which althongh not acknowledged as mine, and appearing under colours very different to those, which to my visual organs, my case had assumed, bore every prohability of being the same. and I consequently made a remark to the effect, that *if* the case of dissection recited by Dr. Wise, wes one which occurred in my practice, I considered it incorrectly described. The Secretary to the Society, undertook to convey this remark to Dr. W. but as the case had already been set forth in the "*essay*," it may have been too late to retract it. This is my statement.

Dr. Wise with truly charitable consideration for my professional reputation, states in excuse for not acknowledging the case to have been mine, that he "differed in opinion" with me "as to the propriety of amputation in this disease," and then resorts to a long list of *extracts from books*, in support of his reasons for so differing. Now, I presume all Dr. W—'s book argument must surrender, to the admissible presumption, that Dr. W. conld not be capable of forming an opinion, on a case he had never witnessed, and the annoying fact, that all his surmises and predictions, have been proved erroneous; there is one circumstance however, which must appear rather extra-

* Natives are not under ordinary circumstances admissible at the General Hospital.

* Four years, have elapsed since the operation was performed on this man, and there is no threatening of a return of the disease, in any other part of the body, as yet.

† I cannot state precisely, at what time I gave permission for Dr Wise to see the dissected limb, it will be sufficient to remark, that Dr. W. did not see it, until more than twenty four hours after amputation, by which time, in a climate such as that of Bengal, decomposition has made some progress.

ordinary, that whilst Dr. Wise's philanthropy, and kindly sentiments, were so alive to the feelings of a *stranger*, he should apparently compliment his *friend*, with all the stigma, attachable to the unauthorized measure.

It is not for me to enquire into Dr. Wise, motives on the occasion, I leave those who peruse our statements, to form their own opinion, all I need state is, that Dr. W.'s account of the dissection, differed so entirely from my own observations, that I should not have recognized by his description of the morbid appearances, that it had been my case, than which I consider, no single case, could possibly go further, to set aside, the very Hypothesis, in support of which, it has been advanced with so much adaptation.

Dr. Wise thinks my objection to his application of expressions, which convey an idea, that the enlargement was constituted of *distinct tumours*, "on dividing the largest portion of one of these tumours to the bone," "hypercritical," and endeavours to explain, how irregular swelling of the subcutaneous cellular tissue, resisted by an unyielding fascia, would give a character to the disease, of its being composed of tumours, this is not a very fortunate allusion, dissection should have convinced Dr. W. as it did myself, that the morbid enlargement, existed *only, exterior, or superficial, to the facia.*

Dr. W. seems to consider me as having been too credulous regarding the patient's history of his disease, because the "Records of Medicine," do not tally with his account; in answer to which, I confess I preferred more direct evidences to "Medical Records," and acted on what I considered indisputable authority;—ocular demonstration, of the man's condition, at the time.

Dr. W. then advances an unhappy misapplication of "dogmas," to expose my physiological ignorance, in stating that "the muscles were much wasted, and soft; as is common after a long state of inactivity, and in this instance they also appeared flattened, from the degree of compression they had probably been subjected to, by swelling of the encircling integument." For writes Dr. W. it is a received "dogma" in physiology, and pathology, that "the covering of organs both in their growth, and their diseased state, neither compresses them nor gives them form;"—Now I presume Dr. W does not intend it to be understood, that he applies the term *organ*, to a mass of diseased skin, cellular tissue, fat, gelatinous matter, serous fluid, &c. &c. &c. and of the *growth* of the muscles, I made no mention, on the contrary, *differed entirely* from Dr. W. as to their plump and healthy appearance. It would however only require appeal, to the daily experience of every practical member of the profession, to decide, that the physiological remark inaptly advanced by Dr. Wise, does not under any circumstances, apply to the effect of diseased, on healthy contiguous parts, and that a continuing morbid increase of matter within confined limits, does produce a degree of pressure on its parietes, and does from them, occasionally receive form, particularly if of fluid consistence, otherwise, how is the distention of the abdominal muscles, and dyspnœa, in ascites, accounted for, the distention of the ventricles of the brain, obliteration of intellect, and of the function of organs, from accumulation of fluid within the head; the form of Hydrocele; the agonizing pain occasioned by the confined collection of pus; is it not also observed, that healthy parts are compressed, and distorted, and even bone absorbed, by the pressure which an opposed enlarging tumour occasions.

Dr. W. then goes on to establish, that the disease is formed by "repeated invasions," and that "abundance of time," is allowed for the recovery of the muscles, from any "tendency to compression which might occur during the acute stage," and that "from the additional weight they carry, the muscular strength of the part affected is increased," from the former of these observations, I suppose it is intended to infer, that the increased accumulation of fluid and soft matter; condensation of integument &c., which evidently takes place on each recurrence of acute symptoms, is again removed. This does not agree with my experience of the natural phenomena of the disease. Or any authority with which I am acquainted, if such was really the case, how comes it, that the limb gradually enlarges. The latter remark could only be verified, where an *increased action of the muscles was exerted,* in order to overcome the "additional weight they carry." Now, in all advanced cases of this complaint that I have witnessed, the muscles situated *on* the leg, have never appeared to be called into action in the act of progression, the limb being swung, or drawn forward, by means of the muscles of the thigh and trunk, the motions of the foot being completely impeded; in the case of my patient the limb was of such enormous size, as to be with difficulty *drawn* after him. If then, it be conceded, that the enlargement of the affected part be *progressive,* the probability, that a power capable of distending a much thickened integument, would also occasion such pressure on the soft inactive surface beneath, as to give to the wasted muscles a flattened appearance, will scarcely be questioned, and such appearance of the muscles I repeat, was present in my case of dissection.

After being at such pains in attempting to disprove a circumstance of no importance whatever, having no connexion with the disease, saving as a mere mechanical effect, it is extraordinary to find Dr. W. taking so very little notice of our *perfectly contradictory* statements, regarding the condition of the blood vessels, when it is considered, that on the diseased state of these vessels, rests the hypothesis he advocates, and in substantiation of which, I conclude this case was introduced; for in answer to my decided assertion, of the arteries and veins, whether deep seated or superficial, being *entirely exempted* from any appearance of disease, Dr. W. states: "I have only to add that the muscles, in the case in question, were, to the best of my judgment, exactly as I have stated; (that is, "large, round, and red, like those of a healthy, strong individual;) and I do not think it will be considered improbable that, in such a diseased structure as the foregoing, the arteries and veins were somewhat changed, as I stated having found them*."

Dr. W. thinks it strange, that I should have observed so much silence in my report of the dissection, regarding the condition of the lymphatics, and contrast my omission, with his "correct account" of these vessels, and their glands; he "exposed, without difficulty, several glands in the ham," which were found to be somewhat enlarged, hard, and red." The fact is, I stated *all* concern. ing them, that with candour I could do, namely, that in the course of a dissection of several hours, I could not distinguish either lymphatic vessels, or glands, amongst such an enormous morbid accumulation of condensed cellular tissue, fat, and jelly, as existed in this diseased limb; and I must congratulate Dr. W. on his superior success, particularly as regards the glands, which I had never understood as being very numerous at the situation alluded to. Whilst however, I confessed my inability, even under the most favonrable circumstances, to make out this minute system, in the present instance; I may I trust, without appearing egotistical, or bombastic, reply to Dr. W.'s rather sarcastic question, as to whether I meant to insinuate that there were no lymphatics, or glands in the lower extremity† that I have the gratification of possessing *substantial acknowledgment* of competency, in that branch of science, directly involving our subject, (Anatomy) from authorities, which probably Dr. Wise will not be inclined to impugn.

Having I presume, clearly exhibited the fallacy of Dr. Wise's Anatomical and Physiological arguments on this case, I will merely extract a sentence from his own letter, in testimony of the value of His Surgical opinion.—"I have never seen a case of Elephantiasis, in Bengal, requiring the employment of the knife, far less one that only affected the fore leg;"—here is acknowledgement of inexperience, and the doctrine which the latter part of this remark would imply, and the phraseology, are equally new to me: I had always considered it an established rule in Surgery, that in disease having tendency to reproduction, an operation was *only* warrantable, where such affection was *local*, and the whole of the diseased structure removeable.

In duty to science, and to myself, I felt that I was called on, to examine a statement with which I did not concur. Having so done; I beg leave to observe, that the practice, and advantages, of the General Hospital are, (at least as far as I am concerned;) open, and welcome, to all, who seek, and avail themselves of such, in a fair, and courteous manner.

In your comment on Dr. Wise's letter, in the last number of the journal, you seem to consider that it would have been complimentary in Dr. W. to have acknowledged the source, from whence he derived the case he published; others will probably agree in opinion with you in this point. His omission of this customary mark of courtesy, however, I should have allowed to pass unnoticed, had his description of the morbid appearance on dissection, not been at variance with my own investigation.

One reason assigned by Dr. Wise for abstaining from mentioning my name is, that he was—"anxious to prevent the possibility of any collision between us." Had Dr. W. felt satisfied that he was about to publish an irrefragable account of the dissection. what oppositiou, had he to anticipate, from a person, to whom he was only known as cheerfully acceding to his former desire. If he was was not entirely convinced of the correctness of his information, the most certain course for avoiding collision, would have been, to have abstained from publishing it at all; or in case of the apprehension of objection, would it not have been more satisfactory to himself, that the validity of such objection should have been ascertained. I have only to repeat, that my notes of the morbid appearances would *not* have been applicable to Dr. Wise's purpose, had they

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* This statement, connected with that, of cutting through *tumours to the bone*, seems altogether contradictory.

† There is another pertinent question by Dr. W., regarding the *colour* of the muscles, which one would have thought, the perusal of my description of the dissection, would have rendered unnecessary.

been so, they would have been at his service, on asking for them

I remain, gentlemen,
Your obedient Servant,
WALTER RALEIGH.*

Calcutta, General Hospital, Feb. 5, 1835.

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* We consider this discussion as here closed and any further communications on the subject must appear extra limites, and be considered in the nature of an advertisement.—ED.

Note to p. 96 *line* 18 *from the top* of the 1st column. The different circumstance under which Dr. W. and myself made our examinations of the dead limb, must account for the difference of our anatomical observations.

REPORT OF THE COMMITTEE, APPOINTED BY THE GOVERNOR GENERAL IN COUNCIL, ON NATIVE MEDICAL EDUCATION

To the Right Hon'ble Lord. W. C. Bentinck, G. C, B. &c. &c. *Governor General in Council.*

My Lord,—We do ourselves the honor to wait upon your Lordship, with our report of the investigation committed to us, in Colonel Casement's official communication of the 3d October last; on the subject of improving the constitution, and extending the benefits of the Native Medical In. stitution

II. Having carefully perused the voluminous documents forwarded by Colonel Casement, including your Lordship's minute on Native Medical Education, it became incumbent upon us, in the next place, to make ourselves conversant with the system of education pursued at the Institution and also at the Medical class of the Sanscrit College, with referrence to a doubt expressed in your Lordship's minute respecting the expediency of maintaining the Lectureship at the latter. We accordingly visited these seminaries and carefully examined the pupils. The result with some of the pupils, all circumstances considered, was generally speaking creditable to themselves and their teachers; but the prominent defect in the system of instruction at both, is, the comparatively little proportion that the practical part of medical education bears to the theoretical. This we are convinced must continue to be the case, until a different system be founded upon a basis of human dissection, and a knowledge of the English language.

III. In reference to the ends of the Institution and its actual state, we also held interviews with the Superintendent and the Secretary to the Medical Board. From these gentlemen we derived a large body of information which your Lordship will find duly filed among the papers we have the honor to forward. We now proceed to consider the state of the Institution generally; its defects; and the nature and extent of the meaesure of reform that suggests itself.

IV. Although it is not within our province to discuss the question of the difference of opinion on several points noticed in your Lordship's minute, as having arisen between the Medical Board and the Superintendent; yet, is it so blended with the general interests of the Institution, that we cannot with justice to them, wholly avoid referring in some degree to it. It scarcely admits of doubt that one consequence of a want of union in the views of the Medical Board and the Superintendent, has been a clogging of the machinery of the Institution; since the latter, it may be naturally presumed, would scarcely be disposed to give very cordial effect to measures, on the expediency of which he was a declared dissenter.

V. According to the testimony of the Secretary to the Medical Board, the pupils are generally selected from a large number, and judged of, by the extent of their elementary knowledge; leaving to Mr. Tytler, the privilege of recommending the rejection of any whom he may deem to be incompetent. Mr. Tytler, on the other hand states (*see his letter of* 23*d. March,* 1833. *forwarding Report of the N. M. I. for* 1832 *par:* 46) that to object to a candidate actually appointed in positive terms by the Medical Board, must always be unpleasant, and that he forbore doing so, with respect to many whose qualifications were very low. To this we think the answer is sufficiently simple- Mr. Tytler in cases where he might observe great deficiency, was expected to interfere; and that he did recommend the rejection of several candidates deficient in qualifications, we shall see presently.

VI. The Superintendent has throughout, evinced an earneat desire, that a preliminary examination of a searching kind, should be insisted upon in the admission of candidates. Hitherto, to be able to read and write* with tolerable fluency, is all the literary qualification required (*see Mr. T's report for* 1830.) We find him in his Report of the Institution for 1831—par. 29—urging the necessity of more attention being paid to the previous habits and education of the pupils, than could be done, when the Institution was first formed, and when it was an object to allure any candidates that might offer themselves, however low in qualification. In many instances the pupils on entering the school were unable to read except with much difficulty and blundering; incapable of making me-

* i. e. Hindoostanneo.

moranda by writing, and so destitute of arithmetic as sometimes to be unable to count to a hundred. Surely candidates like those described ought never to have been admitted at all.

VII. The controul exerted by the Medical Board over the Institution is essentially absolute, and has always been so considered by the Superintendent. Two instances will suffice to place this circumstance in a clear point of view before your Lordship. On one occasion (*see No.* 12 *of Mr. Tytler's appendix)* Mr. Tytler recommended to the Board the rejection of fourteen candidates as quite unqualified. The Board however cancelled the appointment of one only, and confirmed that of the rest, stating that there were no other candidates better qualified. In such a case why not wait until properly qualified candidates came forward, instead of appointing persons declared totally unfit, by the Superintendent; who had the best opportunities of judging, and could have no other motive for recommending their discharge than the good of the service? The other instance is consistent with our own experience. In reference to a suggestion in your Lordship's minute; after careful examination of the parties and with the entire concurrence of Mr. Tytler, we recommended the immediate discharge of fifteen of the pupils noted for idleness, ignorance and incapacity. Most of these had been in the Institution upwards of two years and were unable to answer the most simple questions in rudimental anatomy; and their elementary acquirements, even though they had been under instruction for the above mentioned period, were far below what we should deem a qualifying standard of admission into the Institution *(see Mr. Hutchinson's examination Question* 25 *and Baboo Ramcomul Sen's Report.)* Government, we learn, referred the matter to the Medical Board, who notwithstanding the joint recommendation of the committee and the Superintendent, to the contrary, have decided that nine of them should be retained in the Institution.

VIII. We conclude that the chief end that Government had in view in founding the Native Medical Institution was to provide a constant and efficient supply of Native Doctors, to act under the immediate superintendence of European medical officers, for Regiments and civil stations, as they might be required. A want of system or rather the existence of a very defective one, is a pervading feature of the institution. The general order of 21st June 1832 gives an outline of what was expected by Government in the way of instruction, but in too general a manner to be a precise guide for the Superintendent, who, perhaps, should have himself submitted a code of regulations for the approval of the Medical Board. Nothing more definite has been set down since, and Mr. Tytler states that to this day, it is quite undetermined what he is to teach, and what the students are to learn (*see par :* 50 *of Mr. T's letter of* 23*d March*, 1833.) No positive rule as to the qualifications of candidates appears ever to have existed, and it is sufficiently evident that very illiterate persons have been admitted. The Medical Board in their selection of pupils, have been swayed a good deal by family claims, giving the preference apparently to the sons of Native officers and Sepoys. As the Institution, however, was not established to form a provision for any particular class, it were better not to recognise such a rule of selection, unless the qualifications of the candidates be of an order to give validity to such claims.

IX As no translations existed at the commencement of the institution, on the different elementary subjects to be taught; it became necessary that as many manuals as could be compiled, should with as little delay as posssible be struck off by some competent person. These which were of a very brief and simple character answered the somewhat desultory purpose of the juncture, but it is obvious that the student could only derive meagre snatches of medical knowledge from them. The labours of the late Mr. Breton, assiduous and laudable as they were, were still only those of an individual, who had, on the spur of the moment, to supplya daily increasing demand. They furnished a thin outline of science, but nothing more. Nevertheless the Native Doctors provided by the Institution, with such comparatively slender means, appear, as far as can be gathered from the Records before us, to have given satisfaction generally, as compared with the former Native Doctors. Mr. Tytler on this head states (*see Report of the N. M. I. for* 1831) that throughout all departments, civil and military, there seems to be an increasing conviction of the superiority of the Native Doctors educated at the Institution, to the former race of those subordinate assistants; and that ths demand for them of late has been so great, he fears whether his utmost exertions will be able to keep pace with it.

X. During Mr. Breton's time, there seems to have been less interference with the arrangements of the Superintendent, than since Mr. Tytler became connected with the Institution. The final examinations of the pupils, it is (*see Mr. Tytler's report as above par :* 43) also alleged were

not so minute formerly as they now are. No copy of any examination of pupils, during Mr. Breton's time, has been submitted to the committee to form a comparison by; Mr. Breton, it further appears, could at once order a tract to be printed, or a plate lithographed, without any previous reference to the Medical Board. Mr. Tytler does not enjoy the same privilege, and is moreover liable to have his translations modified and criticised as the Board may deem fit.

XI. Among the objects to be taught at the Institution, Mr. Tytler justly considers Anatomy, as claiming the chief place. Taking the result of the pupils, examination, as a test of the course of Instruction, it cannot but be deemed defective. The principal part of what the pupils know, has been derived from books or tracts, not from demonstration; as is evident by their mode of answering questions. Pupils who had been in the Institution upwards of two years had never been taught the names and situations of the muscles of the upper extremity. Mr. Tytler's plan of teaching may be generally stated thus. Elementary treatises on the different parts and organs of the human body, are put into the hands of the students, who hear daily lectures on the same. Each set of parts takes its turn in the course of instruction as the bones, the ligaments, the muscles, the blood-vessels, &c., before an attempt is made to shew their minute relation to each other (*see Mr. T's report for* 1831, *par:* 12 *see also his replies to questions* 41—42—*and* 43). We would express our dissent however, from Mr. Tytler, on the point, of his leaning so much as he seems to do (unless we misapprehend him) to the conclusion, that it is possible to communicate sufficiently correct Anatomical and Surgical notions, to the students, to enable them sufficiently to fulfil their duties, from dissecting inferior animals, aided by an occasional glance at a dead body in the general Hospital.

XII. Respecting translations; on the Superintendent's forwarding one into Hindoostanee of a small tract on gun-shot wounds, to the Board, for approval, *(Mr. Tytler's letter of 7th April,* 1831.*)* That Body, by their Secretary, declared their opinion (*see Mr. Hutchinson's letter of* 13*th May,* 1831.) that the tract in question was quite inadequate to the purpose contemplated, as no adequate idea of gun shot-wounds could possibly be conveyed within the contracted limits of four duodecimo pages: entering their protest at the same time against the accuracy of several of the doctrines laid down in that tract: and ending by suggesting the propriety of Mr. Tytler's making an abridged compilation from the works of Guthrie and Hennen, or even from the article on gun shot wounds in the last edition of Cooper's Surgical Dictionary. Mr. Tytler replied, that in preparing the little tract in question, it was not his intention to present it as a complete treatise; all he proposed was to furnish a tract of suitable length for the pupils. The works of Guthrie and Hennen, he observed, comprise upwards of a thousand closely printed Octavo pages, to make an abridgement of which, would be an undertaking of much labour, and would interfere greatly with the preparation of others—independently of risk after all, that his compilation might prove unsatisfactory to the Board, and much time be thus lost. There certainly appears to be a good deal of reason in these remarks, and as respects the alleged inadequacy of the tract, to the purpose contemplated, it may be asked what that purpose was, and *how* it was inadequate to meet it? The end contemplated was to give the students a simple concise and general idea of gun-shot wounds. This the tract, which was rendered entire from Dr. Hooper's Surgeon's Vade Mecum, did, in a succint and sufficiently elementary manner. Its brevity then considering the object was in its favour. In regard to the doctrines of the tract protested against by the Board, as they did not specify them, we have nothing to remark.

XIII. With reference to a treatise on the blood vessels and the absorbents, proposed to be printed, the Board approved of the treatise; but also expressed an opinion, that the tract might be rendered much more complete and useful, were Mr. Tytler to intersperse it with a few cursory practical remarks, on the subject of the relative situation of the vessels of the thigh, arm, and neck; as connected with the operations of Aneurism of the vessels passing over the brim of the pelvis; and finally on the course of the Epigastric artery, so far as that is connected with the different operations of Hernia. Experienced as he is, in teaching Native youth, and from the nature of his pursuits, fully comprehending the obstacles that stood in his way; it is perhaps to be regretted that Mr. Tytler was not permitted to pursue the course he had traced out for himself. The tract on the blood-vessels was much required, as there was no other in the Institution on the subject. It was, besides, intended for the youngest class commencing anatomy, and to whom the nature of the operations respecting Hernia and Aneurism could not be rendered intelligible, at that early stage of their studies. Nay, it may be added, that these operations are utterly beyond the province of Native Doctors educated at the Institution under the pre-

sent system ; as it never could have been intended, that with their very defective opportunities and qualifications, they should undertake such nice and serious operations, requiring a most complete knowledge of human anatomy and the greatest surgical skill.

XIV. Generally speaking the final examination appears to be as well conducted as circumstances would admit, although the desirableness of its being of a more open character at once impressed itself upon us. Occasionally questions of a difficult, or of an entirely theoretical nature, are put, that even, when answered readily, can under present circumstances be no proper test of sound acquirements and practical ability. In illustration of this opinion reference may be made to a copy of the examination of Dursun Sing *(see Mr. Tytler's appendix, No 9 also see Do. Do. No* 8.*) Out of 21 questions three only are of an useful and practical character, the rest have reference to the circulation of the blood in the adult and in the fœtus ; a mere rote knowledge of which, on the part of students intended to fulfil duties of such a subordinate kind, as those in which Native Doctors have hitherto been engaged, can be but of questionable value.

XV. The number of pupils at the Institution is sixty-seven *(see Mr. Tytler's appendix, No. 2)*; of these thirty three are Hindoos ; the rest Mahommedans. The birth place of the whole is in the upper provinces , with the exception of five from Chittagong and one from Moreshedabad. The rank and station in life of their fathers, is as following:

Sons of	Subadars	5
„	„ Jemadars,	16
„	„ Havildars	15
„	„ Naicks	3
„	„ Sepoys	3
„	„ Pundits	3
„	„ Native Doctors	6
„	„ Hakeems	1
„	„ Fifer	1
„	„ Mootsoodee	1
„	„ Thannadar	1
„	„ Moonshee	1
„	„ Unspecified	11
	Total	67

of these, six or one eleventh of the whole only, are sons of Native Doctors, while forty two are sons of non-commissioned Native officers, or sepoys. The paucity of the former would seem to indicate either that the Native Doctors do not possess the requisite interest to get their sons provided for in this way, or that they do not consider a Native Doctorship in the service an eligible provision for their sons. The conduct of only thirteen of the whole number is reported as good by the superintendent, that of thirty five is stated to be indifferent, and that of the remainder to be only tolerable or very indifferent. This of itself is proof sufficient, were there no other, that much greater stress ought to be laid upon the previous qualifications of the students, on their admission into the Institution, than has hitherto been done.

XVI. The pupils are taught by the Superintendent in person, aided by Native assistant teachers. The former are divided into four classes for Anatomy, Materia Medica, Practice of Physic, and Surgery. The Lecture days are Wednesday and Saturday from ½ past 10 o'clock A. M. to 4 P. M. The hours set apart for private study are all those on which the pupils are not engaged at the lectures, reading with the Assistant teachers, or at meals. The students all sleep in one large hall, where they also pursue their private studies. A muster roll is called twice a day once at 5 P. M. and again at gunfire in the evening, when the pupils have finished reading with the Assistant teachers.

The sources of practical improvement in their profession are the general Hospital, the Native hospital in Durrumtollah Street, the H. C. Dispensary, the Eye hospital, the Gurrenhattah dispensary, the Colingah dispensary, and the Vaccine establishment, where they attend at stated times in alternate parties. For the routine of study on days when there are no lectures, and for the economy of time in attending upon the several establishments mentioned above, we would respectfully refer your Lordship to Mr. Tytler's appendix Nos. 4 and 6. The Holidays are all Sundays throughout the year ; the Mahommedans have nineteen or twenty holidays peculiar to themselves, exclusive of five Hindoo holidays (viz. Dewanube, Dushera, Hoolee, Bhundun, Chunick, 1 day each) in which they always like to join. The Hindoo Holidays are those set down in the Directory, 34 in number.

The Lectures are delivered in the Oordoo language, the anatomical names as also those of medicines &c. being in Latin and English, with Arabic adaptations. The pupils, on the days when there are no lectures, study the various tracts by the late Mr. Breton, and the present Superintendent.

The so called rules of the Institution (*see Mr. Tytler's appendix, No. 7,*) are of a very general nature, having reference rather to the conduct of the students out of the Institution, than within its walls. They do not appear to be duly engrossed, or to have received the sanction of authority.

XVII. We find that the number of Native Doctors supplied to the State since the

* See appendix.

first establishment of the Institution, to the 1st January last, amounts to one hundred and twenty.

There can be no question, that the Institution itself, was an improvement upon a state of things, that left the supply of Native subordinate medical Assistants for the army and jail Hospitals, &c. entirely to chance. It is also not unlikely that it has to an extent of course very limited, diffused some useful medical knowledge among the Natives. Neither can it be a question, that although it has supplied Native Doctors of higher qualifications than any that were procurable before, since the breaking up of the general Hospital system throughout the country (*see Dr. Nicolson's replies to the finance committee's queries*), yet that the Native Medical Institution labours under several defects which time has clearly developed, and the fitness of things arising out of altered circumstances, and an improving concurrence of events; evince the necessity of reforming. The prominent defects of the Institution may be summed up under the heads of, 1. The absence of a proper qualifying standard of admission. 2. Scantiness of the means of tuition. 3. The entire omission of practical human anatomy in the course of Instruction. 4. The want of regularity as to time in admitting students. 5. The want of due stimulus throughout. 6. The shortness of the period of study. 7. The want of means and appliances for the convenience of private study. 8. The desultory character of their attendance on the practical means of Instruction. 9. The inconclusive nature of the powers and authority wherewith the superintendent is vested. 10. The mode of conducting the final examination.

XVIII. In considering each of these defects separately, we beg, in the order just stated, first to submit to your Lordship that according to the mode of admission which now holds at the Institution, there is scarcely a shadow of qualifying standard either as to age, condition of body, conduct, abilities, or acquirements. In a subsequent place we shall endeavour, very respectfully, to demonstrate to your Lordship the necessity of paying greater attention to each of these.

(2.) The scantiness of the means of teaching includes the limitation to a single Professorship and the almost total want of mechanical *materiel*, and necessary text books. One Professor, be his qualifications what they may, is not competent, especially in a climate like this, or indeed in any country; either constitutionally, or intellectually, to teach a number of students Anatomy, Materia Medica, Surgety, and the practice of Physic; as these branches ought to be taught. The energies of the teacher, in spite of his utmost exertions, must almost unconsciously, become affected by a want of unity of system. There is therefore unavoidably an inconclusiveness in his labours, which would not be the case if he had only to teach one branch, and to concentrate all his powers upon it. Neither will the students listen with such fixed attention to one teacher as they will to several. There is a monotony and and weariness apt to be produced in the learner, when he listens, day after day, to only one Lecturer. A change on the other hand proves refreshing to the master no less than to the pupils; add to which that the division of labour enables the former to recruit his powers and enrich his stores of information. But, another and a cogent objection suggests itself, and that is the extreme difficulty of suplying a vacancy in the superintendency, as at present constituted. Supposing that which is a moral impossibility, viz. that the present incumbent is fully qualified in every respect, to teach all the branches of medical science, as they ought to be taught, where, we would respectfully ask, could a successor be found in the event of a vacancy? That is to say, an European Gentleman of extensive oriental learning, combined with high professional attainments. Nay, if we may venture to express an opinion on that head, we would say that the abstruse study of languages, is of itself rather at variance with the habits and dispositions which are most favourable to the cultivation of anatomical science, and the laborions details of the dissecting room. Anatomy to be taught efficiently and well, requires in the Professor of it, a more than ordinary singleness of purpose, and share of physical and mental capacity, great energy, and a certain measure of enthusiasm for the pursuit itself These remarks we need scarcely represent, have no individual reference whatever, but bear strictly upon the general question. Of text books, with the exception of certain tracts already alluded to, there are none. There is not even an entire skeleton, or a complete set of unarticulated bones in the Institution. There is also a woeful deficiency as respects casts, plates, and models; and it is not so much a matter of surprise that the students should not be more advanced in anatomy; as that they should know so much of it as they do, considering all the disadvantages in the way of their teacher.

(3.) The entire omission of practical human anatomy in the course of instruction, has been the result of necessity. At the time of founding the Institution, to attempt introducing this branch of science was out of the question. The juncture was not ripe for such an experiment. Times are, however, much changed and the

difficulties that stood in the way appear no longer insurmountable. The omission of anatomy, were there no other defect in the establishment, would of itself be sufficient to shew the urgent call for a reform in the system. To enlarge upon the point to your Lordship would be superfluous.

(4.) There are no stated times for the reception and registry of pupils, or as it is called in collegiate language, matriculating. Accordingly, they apply for admission at all times throughout the year; which must render it exceedingly difficult, or next to impracticable, to classify them properly, or to carry on their education systematically and comprehensively in the aggregate.

(5.) The whole system is deficient in a due application of stimulus. It appears from Mr. Tytler's reply to Question 25 that the pupils receive a monthly stipend from Government, *in proportion to the length of time they have been attached to the Institution.* Thus, a pupil on entering, is allowed eight Sonat Rupees per mensem, which is increased to 10 rupees the second, and to 12 rupees the third year. It would surely be better to regulate the allowance by individual merit, than by length of pupilage. Among the large number of ignorant and inefficient students brought to the notice of the committee, it will be observed that some of them entered their third year of study, and the majority their second; sufficiently shewing that proportioning increase of salary to mere residence at the Institution, is rather detrimental to their advancement than otherwise. It appears little short, indeed, of a premium on idleness. It is questionable if the maximum of monthly stipend during the period of study, as well as of the pay afterwards as a Native Doctor in the service; are sufficient inducements for high spirited young Natives of respectable connexions to offer themselves as candidates. Add to this; that there is no rank or comparative honor whatever, attached to the situation of native Doctor. During the period of undergoing instruction, the only stimulus presented to the mind is the pretty certain prospect of becoming a native Doctor, and nothing more. There is no apparent inducement for the intelligent student, while at the Institution, to exert himself more than the indolently inclined, or the dunce, no honour to be attained by the exertions that distinguish one student from his fellow, no reward for the exhibition of superior attainments, beyond the passing commendation of the master.

(6.) The period allowed at the institution for the education of the pupils, is from two years, to two and a half. This is by far too limited a course of study, for any thing but a very superficial amount of acquirement. It may have answered hitherto, in educating native Doctors, to the level of inferior Regimental Assistant Apothecaries, but it will fulfil no other purpose.

(7.) The want of means and appliances for the convenience of private study is glaring. The time passed in the lecture room developes the lessons of art and science; but it is in the privacy of retirement that these lessons are digested and considered in their most important bearings. It is next to impossible for the students of the Native Medical Institution, to devote their private leisure to any thing like meditative and profitable study, while confined promiscuously to one apartment, where they all sleep or retire to, without the means of abstracting attention or cultivating reflection, subject to the interruptions of each other, and wanting books, pens, ink, paper, and a table to write on, or a chair to sit upon, for the sleeping charpoy answers both purposes.

(8.) Their required attendance, upon the establishments for affording practical instruction, appears to be of a very desultory character. They are expected, as it were, to learn too many things at once, and accordingly in quick succession attend at the General hospital, the Native hospital, the Eye hospital, the Colingah dispensary, the Vaccine establishment and the H. C. Dispensary; at none of which establishments is it obligatory on functionaries to attend to the advancement of the pupils of the Institution; nor do we see how they possibly could, while the students are ignorant of the English language, even if these gentlemen could spare sufficient time for the purpose.

(9.) The powers and authority vested in the Superintendent, are, as at present understood, by no means precise. There ought to be a comprehensive code of regulations, to serve as a guide to him; and there should be no interference whatever from without, either with his mode of teaching, or the nature of the subjects to be translated, or with the extent of tracts and manuals; save on a formal representation by a committee, to be appointed by the Government.

(10.) At present we shall not advert further to the head of the final examination, save to remark, that we most entirely and very respectfully concur in the view expressed on that point, in your Lordship's minute. The present mode of examination is no test of solid qualifications, since Mr. Tytler admits that the course of education pursued by him is not to be considered as that, which if left to himself, he would prefer, but that which the circumstances he is placed in, combined with the extreme

scantiness of the means of instruction, compel him to adopt. Nay he even distinctly avows (*see answer to Question* 99) that he has been obliged to instruct the pupils on many points, which he should have considered quite unnecessary, except to enable them to pass the examination of the medical Board.

XIX. On a serious consideration of all the facts before us relative to the system of education pursued at the Institution ; we can not come to any other conclusion, than, that generally speaking, persons taught upon such a defective plan, ought not to be appointed to any but very subordinate situations in the medical service of the state. The basis of all Medical and Surgical knowledge is practical Anatomy, and the acquirements of the students in this branch are but *very* superficial ; for of relative Anatomy they know next to nothing, nor is it in the nature of things that they should be better grounded. Their knowledge of the practice of physic, we fear, is but vague and theoretical. It is true that they attend at the General Hospital, but they are there merely spectators of what for the most part they do not understand; all the cases being kept in the English language. At the Native Hospital, they can only follow the symptomatology and treatment of the case, by inquiries of the patients, since the cases, like those in the General Hospital, are kept by an European Medical Gentleman. At both Hospitals, but few operations, comparatively speaking, are performed. To acquire the art of operating with any prospect of success, however, it is necessary that the student in the first instance, should practice on the dead body. But, it may be replied, an Alumnus Native Doctor of the Institution, has actually amputated a limb: very good, but it would be necessary for us to be made acquainted with all the circumstances preceding, and following the operation, before we could express an opinion either as to its necessity or success. At any rate a solitary fact of this kind, will not do to found a general argument upon, in favor of the Surgical skill of all the alumni. As well might it be contended that because a sow gelder, it has been said, was the first to performthe cæsarean operation successfully, in modern times, that one should always be called in, when there is a likelihood of such a desperate measure becoming necessary.— Neither can we concur in opinion, with Mr. Tytler,as to the competency of persons educated at the Institution,as now conducted, to the undertaking of any important operation. To render this point more clear, we beg to subjoin his reply to one of our qnestions. "The intelligent pupil "might be safely trusted to perform most "Surgical Operations, except to search for "deep seated abscesses, amputation at the "hip and shoulder joint, or Hernia, Li- "thotomy, and the extirpation of the "more complicated tumours." "But," adds Mr. Tytler, "I do not assert that they could not perform these:" it would indeed be a marvel if they could, for in that case it would be almost unnecessary for the state to go to so much expense, in keeping up an European Medical staff for the Native army and at civil stations. Now Mr. Tytler's declaration virtually, assumes, thatt he Native Doctors educated at the Institution, are able to perform *all* operations whatsoever: save those of Hernia, Lithotomy, and the extirpation of the more complicated tumours ; nay a modest caveat is entered even respecting them. To suppose all this, we cannot help thinking, is to yield to a pleasing delusion. The badness of the present system of teaching, is sufficiently apparent, from the testimony of the superintendent himself in his replies to Qnestions 41. 42. 43. It would be absurd to suppose, that such a contracted and desultory scheme of instruction, could be capable of giving to the student, that insight into Medical Science which would be likely to endue him with a taste for medical knowledge, and a disposition to continue his studies after getting over his examination before the Medical Board! How many open a book after they have passed that ordeal? Indeed they have no books to open, but such tracts as they have already perused over and over again, and which cannot give them enlarged and practical views of their profession. Not only is the amount of their knowledge smattering, that gives them a reluctance to act upon their own responsibility—but though they have no official rank assigned them, yet, they fancy themselves at least on a par with those servants who receive the same rate of pay ; and hence the abuse of their leaving to some understrapper, what is, and ought to be, a portion of their own duty. Several of the subordinate duties of the surgeon are too much for their fine nerves, and why? because they consider them beneath them—since having passed their examination they deem themselves elevated above such. The mere ability to enumerate a string of pharmaceutical terms and of answering a few detached questions in elementary chemistry, are no proofs that they understand the principle of chemical compounds.

XX. Your Lordship will have anticipated from the preceding remarks, that after the maturest consideration of the subject in all its bearings ; it is the conviction of the committee, that the Native Medical Institution not only stands greatly

in need of Reform, but of a speedy Reform. The scheme of Reform too, we would respectfully submit to your Lordship, ought to be ample, comprehensive, and worthy of a great government; not intended merely to supply the wants of the state, but of the people, and to become what it may confidently be expected it would, a moral engine of great utility and power. Should the Government be disposed to admit this conclusion; and to adopt the committee's plan, it would, at the outset, be the simplest and the most expedient course to abolish entirely the present Institution, the Sanscrit College Medical class, and the Medical class at the Madrissa. To allow those Native Doctors already employed to continue their services to the state, till they became absorbed; and as an equivalent for such, to make an allowance of ten Rupees per mensem to medical officers to find their own dresser and compounder. The amount saved to Government by the abolition of the Native Medical Institution, and the saving in the pay of Native dressers and compounders, according to this new rate, might be appropriated to the College.

XXI. To all reflecting men, it is obvious, that much remains to be done, for the advancement and regeneration, of Native mind and character, throughout India. It would indeed be a moral solecism, if at a juncture when the avenues to useful and trust worthy service in different departments of the State, are liberally and wisely open to qualified Natives; their accession to employ, in one of the most beneficial walks of life, should form the exception to such statesman-like views. The improvement of the Natives of India, in medical science, in importance, falls not an iota behind the consideration of their advancement in any other branch of knowledge whatsoever. The proper instruction of a body of Native youth in the science of medicine, has a direct reference to the interest of the Government and to the well being of the governed. In administering the affairs of any country, the most economical mode of doing so, (to say nothing of other considerations) is, to put the indigenous moral energies of the country itself, as much as may be expedient, into effective operation for the purpose. This rule applies equally to the medical service as to any other. The employment of foreigners is attended with enormous expense, and every day, the necessity of reducing it, will become more and more apparent. If then, there be a possibility of educating Native Doctors, upon broad European principles, so as gradually to admit of foreign practitioners being dispensed with, in the Native army and civil stations; here at once the direct interest of the state in this question becomes manifest. Nor is the indirect interest of the Government, in the matter, one of little weight, when we bear in recollection, that in proportion to the welfare of the people, will be the solid and legitimate prosperity of the ruling power. To alleviate disease and to save life, are objects of deep obligation on the statesman-as well as the philanthropist. The mischief done by ignorant and presumptuous Native pretenders to Medical and Surgical knowledge, throughout India; and that daily, is incalculable. Entirely uneducated in anatomy or the simplest principles of chemical action, the Native quacks who prey on the people, hesitate not to use the most dangerous drugs and poisons; in such a heedless and unscientific manner as to produce lamentable consequences; and to make incisions and perform operations, that require anatomical skill and delicate handling. There is no part of the world, perhaps, under an enlightened Government; where there is so great a proportion of young people, particularly children, carried off by sickness, compared with the births, as in India. Defective as the whole system of Native practice of physic, is at best, in no respect is it so sadly wanting, as in the treatment of the diseases of infants and children. Much vice and iniquity arise too, in consequence of children being deprived by death of their parents, at an early age; and being thus left entirely at the disposal of unfeeling relations and friends, for subsistence; which leads them to form vicious connections, and to fall into abandoned habits. Parents, on the other hand, are plunged into despair at the death of their children, and to say nothing of natural feeling, there is an obvious reason why they should; when it is borne in mind that men of the middling and labouring classes who have the greater number of grown up children, are most free from pecuniary distress, have most comforts about them and make the best subjects. (*see Capt. Anderson's letter.*)

A recollection of these facts will, we doubt not, constitute a grave claim upon the humane consideration of your Lordship. It is to be feared too, that native quacks are sometimes employed as the unprincipled but ready and secret agents of sinister designs; and it is notorious that Natives of rank will, at times without hesitation, receive medicines presented by Europeans, and made up by a European apothecary, while they refuse to take those recommended or made up by a Hukeem. Moral improvement of both parties may reasonably be expected to follow in the wake of sound and enlightened medical education; before which, degrading superstitions and their concomitant vices, would disappear. Justly taking

pride in their own comparatively elevated position, and accustomed to offices of benevolence, Native Medical practitioners educated under such an improved system, would not fail to give a regenerative and liberal tone to society around them ; which would gradually extend its benignant influence, and the number of lives annually saved would add to the aggregate of general prosperity.

XXII. Agreeably to your Lordship's direction to that effect, we called upon Mr. Tytler to prepare a synopsis, of what he conceives, the pupils at the Institution should be taught, in the different branches of Medical science. This document, according to our view of it, does not contain by any means, such a comprehensive and improved scheme of education, as the circumstances of the case indicate the absolute necessity of. Leaving it entirely out of the question then at present, we would very respectfully submit to your Lordship in council, our serious opinion, that the best mode of fulfilling the great ends under consideration, is for the State to found a Medical college for the education of Natives; in which the various branches of Medical science, cultivated in Europe, should be taught, and as near as possible on the most approved European system; the basis of which system, should be a reading and writing knowledge on the part of candidate pupils, of the English language, and the like knowledge of Hindoostanee or Bengallee, and a knowledge of Arithmetic ; inclusive of course, of proper qualifications as to health, age, and respectability of conduct. The Government might select from the various young men, who should pass the final examination, the most distinguished and deserving, for filling up vacancies, as sub-asistant surgeons. A knowledge of the English language, we consider as a sine qua non, because that language combines within itself, the circle of all the sciences, and incalculable wealth of printed works and illustrations ; circumstances that give it obvious advantages over the oriental languages, in which are only to be found the crudest elements of science, or the most irrational substitutes for it.

XXIII. Of the perfect feasibility of such a proposal, we do not entertain a doubt. Nevertheless, like any other, it will be found to divide the opinions of men of talent and experience. These will divide into an Oriental and an English party. Mr. Tytler's long replies, have imposed upon us the necessity, of entering at greater length into the argument respecting the feasibility of the contemplated plan, than we could have wished. We beg to apologize to your Lordship for this circumstance, but as Mr. Tytler instead of giving brief and simple answers to our questions, preferred committing them to paper in the form of long minutes ; it became incumbent upon us to offer something in the way of refutation. The determined Orientalist having himself acquired the Sanscrit and the Arabic, at the cost of much, and severe application, as well as of pecuniary expense ; will view with great repugnance a suggestion of teaching science in such a way as may cast his peculiar pursuits into the shade, and independent of a language which he reveres as classical. The advocate for the substitution of the English language, on the other hand, will doubt whether the whole stores of Eastern literature, have enabled us to ascertain a single fact of the least consequence towards the history of the ancient world ; whether they have tended to improve morality, or to extend science : or whether, with the exception of what the Arabian physicians derived from the Greeks, the Arabic contains a sufficient body of scientific information to reward the modern Medical student, for all the labour and attention, that would be much more profitably bestowed on the study of the English language ; and lastly whether the modicum of unscientific medical literature contained in the Sanscrit, is worth undergoing the enormous trouble of acquiring that language.

Unlike the languages of Europe, which are keys to vast intellectual treasures bountifully to reward the literary Inquirer, those of the East, save to a limited extent in poetry and romance, may be said without exaggeration, to be next to barren. For history and science then, and all that essentially refines and adorns, we must not look to Oriental writers.

XXIV. Mr. Tytler has favored us with his opinions, on the question under consideration, at great length. The Rev. Mr. Duff whose experience in instructing Native youth, is extensive and valuable, has also obliged us with his sentiments on the subject ; which are entirely at issue with those of Mr. Tytler, who takes up the oriental side of the question, with equal ardour and ingenuity.

Mr. Tytler denies, that a system of educating the Natives through the medium of English, would be in the least more comprehensive, or by any means so much so, as one carried on in the Native languages ; (Mr. Tytler in that phrase including Sanscrit, Arabic, and Persian,) and considers it wholly inexpedient as a general measure.

The Revd. Mr. Duff, on the other hand, although acknowledging that the native languages, by which we understand the Bengalee in the lower provinces, and the Oordoo in the higher, alone are avail

able for imparting an elementary education to the mass of the people, affirms that the *popular* language, does not afford an *adequate medium* for communicating a knowledge of the higher departments of literature and science, &c. "No original works of the description wanted" he observes, "have yet appeared in the Native languages: and though much of a highly useful nature has been provided through European talent and perseverance, no translations have been made, in any degree sufficient, to supply materials for the pro secution of the higher object contemplated, neither is it likely in the nature of things, that either by original publications, or translations of standard works, can the deficiency be fully or adequately remedied for such a number of years to come, as may leave the whole of the present generation sleeping with their fathers." (*Answer to Question* 20. *p.* 17.)

XXV. Mr. Tytler's reasons for his unfavourable opinion, in regard to the proposed plan, arise, he informs us, partly from the nature of the language in general, and partly from the intrinsic difficulty of English itself. The difficulty it strikes us, is magnified in Mr. Tytler's imagination, and at any rate can scarcely be greater than that of acquiring Arabic and Sanscrit, which are about as foreign to the body of the people as English. "A bare knowledge of the English," observes Mr. Tytler, "or of the words for objects, is plainly no increase of knowledge, unless it be accompanied with some additional information respecting the objects of which the words are the signs." This is so self-evident a truism, that we are rather surprised Mr. Tytler should deem the stating of it, of any use to his argument. The mere capability of uttering the word opium, for instance, would be of little use, unless, accompanied by a knowledge of the qualities of that drug. It is not with a view to recommend a knowledge of mere words that we troubled Mr. Tytler for his opinion, and have now the honor of addressing your Lordship, but to rescue if possible the course of Native Medical education from this, its pervading and crying evil; for assuredly, nothing that has yet been made manifest to us, tends to shew that the pupils of the Institution, under the present system, acquire much beyond mere words; or to demonstrate, that an acquaintance with Sanscrit and Arabic vocables, will give better ideas of *things* important to be known than English. In fact to teach English science, English words must be used; or in their stead, Arabic and Sanscrit ones must be coined. With the highest opinion of Mr. Tytler's talents, acquirements, and zeal, and the greatest respect for his character, yet must we not be blinded to a certain degree of partisanship, which unconsciously, we doubt not, has apparently warped his otherwise excellent judgment, on this question. A discrepancy in his opinions on this subject, however, appears to exist, for he would to a certain extent teach the pupils—on English principles. If your Lordship will turn to Mr. Tytler's synopsis, it will there be seen, that he proposes to teach the pupils the Latin and English names of the corporeal organs, and of the articles of the materia medica. For this purpose he would instruct them in the English system of spelling and pronunciation, in the declension of Latin nouns, and their rules of concordance. He would, in a word, lead them to the half way house of English education, and there stop.

XXVI. "English" proceeds Mr. Tytler "is one of the most difficult of all languages, and the most diversified in its origin. It arises from three sources; Saxon, Latin, and Norman French. Its words and idioms vary in accordance with these three. Hence a correct knowledge of it can be obtained only by a certain degree of knowledge of all the originals." For the attainment of a hypercritical or highly scholastic knowledge, such as is not possessed by one Englishman out of a hundred; Mr. Tytler's position may be readily acceded to How many thousands are there, however,of Englishmen, persons of ability and intelligence in various walks of active usefulness, who know nothing, or next to nothing, of pure Saxon, Latin, and Norman French! Nay, there is reason to suppose that there are not a few skilful and experienced surgeons not better versed in these languages, but who are valuable men in the profession notwithstanding. Will a Native sub-assistant surgeon be the less capable of being taught to amputate a limb, because he cannot give the critical etymology of the words, knife, limb, cut? surely the great ends of life are not to stand still, for want of knowledge of scholastic roots? It would be superfluous to point out in a more elaborate manner, how very overstrained, and inapplicable to general experience, Mr. Tytler's argument is.

XXVII. As very apposite to the subject under consideration, we beg to submit an Extract or two from a forcible article by the late Dr. Duncan, Junr. on Medical education, which was published in the Edinburgh Medical and Surgical journal for 1827. "The knowledge of languages in itself derives its chief utility from its facilitating the acquisition of useful knowledge; and therefore, as the mind may be nearly equally disciplined during the ac-

quisition of any one language as of any other, their utility is directly proportional to the value of the information contained in the books written in them." Tried by this test how utterly mispent must be the time devoted by the Native Medical student to the study of Arabic, Sanscrit and Persian! Proceeds the article quoted. "How many are there of an hundred"—says Locke "even amongst scholars themselves, who retain the Greek they carried from school; or even improve it to a familiar reading and perfect understanding of Greek authors." —Continues Dr. Duncan. "It is argued in favor of the study of the Greek language that it is the language of the fathers of physic; and that the terms of medical art have been almost all borrowed from it and the Latin; and that it seems impossible to understand properly their meaning, without possessing some knowledge of the sources from which they have been derived. The first argument would be nearly equally conclusive in favour of the Arabic, that physicians might read Avicenna and Rhases in the original; and with regard to the last, we shall reply on the authority of Dugald stewart. 'It is in many cases a fortunate circumstance when the words we employ have lost their pedigree, or (what amounts nearly to the same thing) when it can be traced by those alone who are skilled in ancient and modern languages. Such words have in their favour the sanction of immemorial usage, and the obscurity of their history prevents them from misleading the imagination, by recalling to it the objects or phenomena to which they owed their origin. The notions accordingly, we annex to them, may be expected to be peculiarly precise and definite.' (*Stewart's Phil. Essay, p.* 184.) Indeed all attempts at descriptive terminology have utterly failed, and have impeded, instead of advancing, the progress of knowledge. Medicine (observes the eminent writer in another place) is a practical profession. That knowledge is most essential to its students, which renders them the most useful servants of the public; and all reputation for extrinsic learning (such for instance as Sanscrit and Arabic) which is acquired at the expense of practical skill, is meretricious, and deceives the public by dazzling their judgment.

XXVIII. Although Mr. Tytler has throughout, unconsciously to himself, we doubt not, overstrained his argument, yet is there one passage, which we are free to confess, trenches on the extravagant. "The great sources of our language," he "states "must be shewn, the Saxon, the "Latin, and the French. We must ex- "plain what words and what idioms are "derived from each, and what changes "they have undergone in their passage. "Till this be all done, difficult as it may "seem, we may by much practice impress "upon the Natives a sort of jargon and "agree to call it English; but it will bear "scarcely more resemblance to real En- "glish than to the dialect of the Hotten- "tots." In a word if we do not make Lexicographers of Native Sub-assistant surgeons, they will not be able to set a fracture, or to prescribe a dose of Calomel; and their English remarks or directions, though perfectly intelligible, will amount in fact to nothing, but a Hottentot jargon! Need we, in refutation of this exaggerated view, remind your Lordship, that there are many respectable Native gentlemen in Calcutta who both speak and write English correctly and fluently? The works of the late Rammohun Roy were not written in a Hottentot dialect; and at this moment there are three Newspapers in Calcutta, printed in the English language, and yet *edited* by Natives. Why should not other native students be equally successful with those alluded to? We readily grant that much is to be yet done to render the English language more popular in India, but assuredly the most likely way of effecting this very desirable end, is not to bestow a premium upon the study of Arabic, Sanscrit and Persian, and to close the portal of employment to the English student.

According to Mr. Tytler, it is not only the difficulty of acquiring the English, which is such a formidable obstacle in the way of the learner; but the almost insurmountable one of finding properly qualified English Teachers. We beg to refer your Lordship to his observations on this head, contenting ourselves with the remark, that if English is not to be taught to Native Medical students, until such an Utopian selection of school masters as Mr Tytler indicates, be made; then must the English language and the treasures of scientific knowledge it contains, be long to them, a fountain sealed.

XXIX. Mr. Tytler has several elaborate comments on the study of Greek and Latin, the scope of which is to shew, that these languages had a greater affinity to the English language, than English has to Sanscrit, Arabic, and Persian. The argument is ingenious but far from conclusive. Latin and Greek, indeed, were the languages of the learned in Europe, as Arabic and Sanscrit are of the learned in India. There the parallelism ends. English, however, enjoys an advantage that Latin did not at the epoch alluded to by Mr. Tytler. It is a *living* language. It is the language of a great people, many of whom it may now be expected, will settle in this country; it is also the language of the

governing power. It is not too much to expect, that the time is not far distant, when English will become much more popular than it is, and when to speak and write it correctly, will be deemed a distinguishing privilege. Let English have fair play, and be placed at least upon a par with Sanscrit, Arabic, and Persian; and it will become manifest to the most indifferent observer, that the Natives study the latter, not because they are the best media for instruction; but because they lead to employment and competency, which the English does not. Perhaps an exception should be stated with reference to the Sanscrit—judging from a recent memorial, of a number of Hindoo youths, to the secretary of the sub-committee to the Sanscrit College; representing that after many years spent in the study of Sanscrit, they are in a destitute condition, as they can find neither employment nor consideration among their countrymen.

XXX. So long as European literature was confined to Latin, Mr. Tytler estimates the attempts of our ancestors as mere forced imitations of the classics, the far greater part of which are now deservedly forgotten. Supposing the fact to be even as stated, it cuts both ways, and we may by a parity of reasoning assume, that so long as Eastern literature is confined to Sanscrit, Arabic, and Persian; the writings of Indian students, will be mere forced imitations of the Sanscrit, Arabic, and Persian Classics. But Mr. Tytler is a great deal too sweeping in his remarks; for many of the works of our ancestors in science, morals, and poetry that were written in Latin, so far from being forgotten, are held in the highest estimation, even at this day, and are remarkable no less for strength of reasoning, than for purity and elegance of expression. We shall be perfectly content if Native students should be found to think as justly and write as beautifully in English, as Buchanan, Bacon and various others did in Latin; or to come nearer our own times, and in a professional walk, as Harvey, Sydenham, Boerhaave, Haller, Heberden and Gregory did, in the same language.

It should be borne in mind, that when Latin was, it may be said, the cradle of science, the English language had not attained that fulness and correctness of which it can now legitimately boast. The style of vernacular writers was not formed, being quaint, pedantic and vitiated; composition was in its infancy, and there were but few writers. The times too, were far from favourable to the cultivation of letters.

To compare English composition as it was in those days, with what it aftewards became, would be to institute a comparison between a Hindoo figure maker, and Canova. Ever since the Reformation, the English language has been advancing to its present magnificent state of universality, copiousness and beauty. It would indeed be a strange thing, if in our day, when more works are published in a year than were, in the olden time printed in half a century; the Native youth of India who may turn to the study of English, should, in defiance of the standard works put into their hands, and in spite of precept and example, follow such pedantic and vitiated models as those alluded to by Mr Tytler. Facts daily occurring around us, demonstrate the groundlessness of such a fear.

"As it was in Europe," contends Mr. Tytler, "so it will be with the English productions of the Natives of India, they will be a mere patch work of sentences extracted from the few English books with which their authors are acquainted." Mr. Tytler should at least have shewn, that to produce such an effect, the circumstances were precisely the same in the two countries. How he has reached his postulate, he has not condescended to say, nor is it of much importance to know, for it is after all a hypothetical assumption. In recommending that Native Medical students should possess a knowledge of English, we are swayed by a hope, not of their writing books good or bad, but of their thoroughly understanding and digesting valuable works in that language, comprising as it does an inestimable body of scientific information; and in progress of time, of their translating them into the vernacular tongues of India, for the benefit of their countrymen. We wish them to be able to drink at the fountain head, instead of depending to allay their mental thirst with driblets of translations, occasionally, from the hands of an European

XXXI. But the exclusive study of English, Mr. Tytler deems, will be chargable with producing an effect which he greatly deprecates. It must necessarily, he thinks, discourage the Natives from the cultivation of *their own tongues*. Were Arabic and Persian their own tongues, there would be some shew of reason in the objection; but when we bear in mind that they are as foreign to the people as English, its validity vanishes at once. To the great body of the people too, the Sanscrit is in effect quite a foreign language, Of the absorption of that language we need have no fears so long as it is the interest of the Brahmins to foster it. But if the thing were possible, we are by no means disposed to view the substitution of English for these tongues as a misfortune. As to the objection that the study of En-

glish would put an end to all Native composition and indigenous literature ; we would simply enquire if there is in the world a less edifying and more barren literature than that of Hindoostan, or one that has done less for morality, philosophy, and science ?

With reference to that imitation of English writers, which Mr. Tytler assumes would beset Native students, that gentleman quotes with complacency a saying of Johnson, that no man was ever great by imitation and amplifies the apophthegm so as to comprehend masses of men ; as if the saying stood, that no *people* ever became great by imitation. The saying thus applied, becomes an untenable sophism ;—for on reflection, we shall find that the converse of the position holds true ; since civilization itself is nothing else but a complex system of imitation.

XXXII. We beg now to call your Lordship's attention to the opinions of the Rev. Mr. Duff. In reply to the question whether in order to teach the principles of any science to Native boys, he considered it necessary that they should know Sanscrit, Arabic, and Persian ; the Rev. gentlemen replies, that in reference to the acquisition of European science the study of the languages mentioned would be a sheer waste of labour and time ; since viewed as media for receiving and treasuring the stores of modern science, there is, at present, no possible connexion between them. On the other hand, in reply to the question if he thought it possible to teach Native boys the principles of any science through the medium of the English language : he replied, that the experience of the last three years has, if possible, confirmed the conviction he previously entertained, not merely that it is possible to teach Native boys the principles of any science through the medium of the English language, but that in the present incipient state of native improvement *it is next to impossible to teach them successfully, the principles of any science through any other medium, than the English.*" He further records his opinion that the study of the English language might be rendered very popular among the Natives. "The sole reason" he justly observes, "Why the English is not *now* more a general and anxious object of acquisition among the Natives, is, the degree of uncertainty under which, they (the natives) still labour as to the ultimate intentions of Government, and whether it shall ever lead them into paths of usefulness,—profit, or honour, only let the intention of Government be officially announced, and there will be a general movement among all the more respectable classes." But the teaching of English acquires much importance when we consider it with Mr. Duff as the grand remedy for obviating the prejudices of the Natives against practical anatomy. The English language, he urges (*Mr. Duff's replies page* 32) opens up a whole world of new ideas and examples of success in every department of science, and the ideas so true, and the examples so striking, work mightily on the susceptible minds of Native youth so that by the time they have acquired a mastery over the English language under judicious and enlightened Instructors, their minds are almost metamorphosed into the texture and cast of European youth, and they cannot help expressing their utter contempt for Hindoo superstition and prejudices.

XXXIII. There is an argument of fact put in by Mr. Duff, which is admirably to the point. We allude to the introduction of the English language and of English science, among the Scottish Highlanders, whose native language to this day is the Gaelic. The parallel is a very fair one, for no people were more superstitious, more wedded to their own customs, and more averse to leaving their native country than the Highlanders ; but since the introduction of the English language among them, the state of things is much changed. The same observation applies to Ireland and Wales, where, as in the Highlands of Scotland, the English is a foreign language, and yet its acquisition is eagerly sought after by the natives of all these countries, as an almost certain passport to employment. There are Medical men, Natives of these countries, scattered all over the world, whose mother tongue is Welsh, Irish or Gaelic, which, as children, they spoke for years, just as the children of European parents in India speak Hindoostanee and Bengalee : with this difference, however, that, the latter soon forget the oriental tongues ; while the youth who acquire the indigenous language of Ireland the Scottish Highlands, and Wales ; never lose the language of those countries, because they do not quit them till a more advanced period of life. For the first years of youth, the Highlanders at school, even of all ranks, think in the Gaelic ; but this does not prevent their acquiring such a fluent and business-like knowledge of English, as to enable them to pass through life with credit, and not unfrequently with distinction. What is there in the condition, physical, or moral, of the Natives of this country, that should render them incapable of acquiring English as easily as the Irish, the Highlanders and Welsh ?

XXXIV. We now come to the last and most important part of our inquiry, viz. the nature and extent of the measure of Reform that suggests itself to us. At present there are about 471 Native Doctors in receipt of pay from Government, varying from 10 Rs. a month to 60. The aggregate expense to Government* for these is about Rs.86,287-10 per annum, of this sum about Rs.34,560 per annum is paid to Native Doctors supplied from the Institution, whose pay averages about 24 per mensem there being 120 in number. Of the remaining 351, we would respectfully propose to reduce the whole at once to Rs. 10 per mensem, which is the salary that the majority now draw and a saving of Rs. 9,607-1 per annum would accrue. But the eventual saving to Government, after the present race have become absorbed, will be Rs. 29,767-1; add to this sum the expences of N. M. In. which, according to Mr. Tytler's report exclusive of the lithographization of tracts, (the expense of which we have not been able to ascertain) is 33,960, per annum and again, allowing for 50 students on the foundation instead of 70, there would be a saving of the monthly stipends of 20 lads averaging 8 Rs. per mensem or say 1,920 per annum. Add still further the sum in round numbers say of Rs. 8000 per annum; that would be saved by the abolition of the Sanscrit College Medical class, making a grand total of Rs. 73,677-1.

XXXV. In the foregoing then, there is something to begin with, though, in establishing a College such as is proposed, the Government must be prepared to incur additional expense; as it is intended that the new plan should comprise a much more extensive range of education than any hitherto propounded for Bengal. It might perhaps be deemed that we travelled beyond our province, were we to indicate how the scheme might be put in the way of adoption, without putting Government to so much expense, as otherwise must necessarily be incurred. Nevertheless, a sense of the duty imposed upon us by your Lordship, in selecting us for this investigation, impels us to declare, that large sums are now bestowed by Governmen upon the mere cultivation of Sanscrit and Arabic, which might be much more profitably and beneficially devoted to English literature and science. We are the more emboldened in delivering this opinion by the circumstance of the general concurrence of intelligent Natives themselves, so far as their sentiments have become known, in the views of the committee upon this important point.

XXXVI. None but pupils of a more respectable class than those hitherto admitted, ought to be received into the Institution. This point may be accomplished in proportion to the prospects held out by Government in a pecuniary sense, to students on entering the service. The greater the inducement to enter upon their professional studies, the greater will be the demand for admission into the Institution. If it be previously announced that all candidates are to be subjected to an examination by a properly constituted body; as to the extent of their acquirements, basing the same upon a fixed standard of qualification, a line will be drawn, so as, in most instances, to ensure the respectability of applicants: while the distinction of castes, which has already been productive of evil to the Institution, and led to misunderstanding, by the system of deception practised, might be thrown aside altogether. In short, the selection of students would rest upon their previous character, conduct, and qualifications.

XXXVII. The collegiate Institution contemplated should be formed with all practicable expedition. It might be entitled the *Calcutta College of Medicine;* in which Lectures should be delivered on the following subjects. 1 Anatomy with dissection of the human body, 2 Chemistry, 3 Materia Medica and Pharmacy, 4 Practice of Physic, 5 Surgery and Midwifery, 6 Clinical Lectures and Medico-legal Medicine.

There should not be less than three Lecturers to teach the above branches. The Lectures of course to be delivered in the English language. A Superintendent or Rector should be attached to the Institution, whose duty it would be to have a general supervision of the whole, but without any authority to interfere directly with the Lectures. He would also have to audit all the accounts of the Institution.

A Hospital should be attached to the Institution itself, capable of holding a hundred beds; as it is impracticable to convey the necessary instruction to the pupils at the General and Native hospitals, even if these establishments were quite convenient in other respects.

The Hospital might be attended (each in his own walk) daily, by the Professor of the practice of Physic, and the Professor of Surgery, assisted by such pupils as they chose to select.

The winter session to commence on the 15th October and to terminate on the 15th March of each year; and the summer session to begin on the 15th April and to terminate on the 15th of August or such other time as might be fixed upon by the College Council. The period between the termination of one session, and the commencement of another, to form a vacation for professors and students.

* Vide Returns from civil and military auditors.

XXXVIII. Previous to admission, each candidate should undergo a preliminary examination by the Rector, assissted by one or more of the professors. No candidate should be admitted under fourteen and over eighteen years of age. No candidate should be admitted labouring under any permanent physical defect whatever, the qualifications required of a candidate should be respectability of connexions and of conduct. A fluent writing and reading knowledge of English and Bengalee, or of English and Hindoostanee. A knowledge of the principles of the first four rules of arithmetic.

No candidate (all other requisites corresponding) to be admitted who would not guarantee, by himself or representative relatives, or guardians, to finish his education at the Institution.

All pupils to be admitted, if properly qualified, on a principle of competition, without exception to creed or caste.

The pupils to be entertained on a general principle of teaching them their profession, without any pledge of conferring appointments upon them; but merely with an understanding, that the vacancies in the service, should be filled up from those who should prove themselves the most deserving of the reward, by diligence in their studies and by the result of a public examination.

XXXIX. The whole school might be divided into three series or sections, to be named alphabetically, A. B. C. There should be a fixed standard of knowledge required of each series, so as to found the privilege attached to each, upon the progessive advancement of the students; without any reference to the hitherto prejudicial rule of their standing as to time in the Institution. The formation of these series should be left entirely to the discretion of the Senatus Academicus or Rector in communication with two professors, who would of course bear in mind the importance of regarding good moral and general conduct, as an indispensible qualification for promotion. The advantages of this arrangement would be a check upon irregular, or improper, or negligent conduct; and it would operate as a greater stimulus to study, by its tendency to excite emulation among the pupils. This change in the system of monthly payment would be brought to bear more forcibly, if the various grades of stipend to the pupils were higher than hitherto, say then instead of 8 10 and 12. On entrance 7 Rs. second class 10 Rs. first class 14. No additional expence to the State would be incurred by this arrangement. To induce respectable young men to take advantage of this Institution, and as a remuneration for the higher qualifications required, the greater length of time occupied in education and the consequent expence and anxiety incurred by the pupils; it would be desirable to create a higher standard of appointments for those so educated, than any yet available for native talent and adventure. A new class of Medical situations might be formed consisting of three grades, viz. Sub-assistant Surgeons; Hospital assistants to the forces; Hospital assistants. The senior class to hold a lower rank than that of assistant surgeons.

XL. The professors in order that they might give themselves up entirely to the performance of their very responsible and onerous duties, ought to be maintained upon a liberal salary. They would also enjoy certain privileges and powers, individually and collectively, Under the first head would fall the enforcement of penalties for non-attendance on Lectures; the selection of his own assistants, &c. &c. Under the second would be included a general controul over the internal economy of the Institution in academy; the nomination of days and hours for the various lectures; the selection of pupils for the different classes; recommendation of candidates for prizes, &c. The duties of the professors to be distinctly defined. The superintendent and the professors to form a senatus academicus, which should annually choose its own president on the day preceding that of the opening of the winter session. Any member of the profession at the presidency, in the service, might be amenable to the honor of being nominated president for the year. No suggestion or modification of an existing rule, or new rule, to be adopted until the sanction of higher authority should be obtained, respecting which tribunal we are now to submit our views to your Lordship.

Hitherto the Native Medical Institution has been subject to the controul of the Medical Board, and owing to that controul being exercised sometimes in a suggestive, and sometimes in an absolute manner, arising, perhaps, from the somewhat ambiguous nature of the general order already alluded to, much misundertaking and difficulty have sprung up, clearly prejudicial to the best interests of the institution. Supposing however, that neither had occurred, it is even still questionable whether, in vesting the controul of the Institution in the Medical Board, such an arrangement be the best calculated to fulfil the required ends. The objections, that militate against it are, the frequent charges which take place in the individual members of that Board. Upon an average there is a new member or a new acting member every 18 months. Each individual, as he enters, has no previous knowledge (having had no opportunity

to acquire any) of the constitution or working of the institution—or should he perchance, have particularly directed his attention to its nature, it is not improbable that he might have some alteration to suggest, and which might, on his recommendation alone, be adopted, though such an innovation might, on grounds not obvious to him, be objectionable.

The second ground of objection is, that a sojourn probably of many years in the Mofussil, from which a member of the Medical Board almost invariably emerges on taking his seat, as well as the effect of a long and arduous service in a trying climate, are circumstances not likely to favour his qualifications to enable him to enter on the new duty of regulating the intricate, though important details, which occur in the arrangement of academical concerns.

A better plan appears to us to be, to place the general control of the institution in the education committee, constituting its members, the governing body : an appeal however lying from its decision, on the part of the senatus academicus, to government, when such a step might be deemed necessary by that body. This arrangement, however, has also its objections, because the gentlemen composing the education committee, are none of them members of the medical profession, and it may hence be inferred, that they cannot have any acquaintance with the subject of medical education, and that they are not the persons best qualified to express an opinion on the subject. To provide for this, it might be expedient, to add to the committee of education, two or three medical gentlemen holding permanent appointments at the presidency. It would be desirable to appoint more than one for obvious reasons, and more especially, as it is not unreasonable to suppose, that on a purely medical academical question, the majority of the committee would be influenced in their opinion, by the views of the individual representing, as it were, the medical profession ; and if there was but one, it is possible that the Medical College might be directed by his views alone, which would scarcely be just to the senatus academicus, in case of a mooted question.

XLI. Inferring as we do, from one or two passages in your Lordship's minute, that in founding such a collegiate Institution as we propose, it could not be the sole object of Government to confine its advantages to the military and civil departments of the state ; but that the end is, not only the supply of proper functionaries for these departments, but also to turn out a class of individuals, who, by virtue of their professional acquirements, would not only supersede the unprincipled empirics who infest every village and town of India, but men competent to supply the place of foreign practitioners among their countrymen. If then, this is the correct view of the subject, it will be admitted that to accomplish the wished-for end, one of the first and most important steps will be, to bring together as large a body of pupils as possible; and then arises the question as to the comparative influence of Europeans, and Natives, in inducing pupils to enter the institution. If we should succeed in throwing on the Native community a certain number of their own countrymen, who had obtained the legal certificates to practice the various branches of medical science in an English College ; it is rational to believe, that their acquirements would soon be called into action, by the vast opportunities they would have of displaying their knowledge, and rendering valuable service to their own countrymen. Their fame would soon become established and it would not be long, before those natives of the higher classes who employ European Medical practitioners, would largely and gladly avail themselves of the professional advice of their countrymen in preference .

As the value of Native Professors became apparent, so would their influence and importance increase in their own community. If then we eventually placed the Institution in their hands, and they were paid (as Lecturers are in England,) by the numbers they are called on to teach, it would be a leading object with them to exert the influence which they gained by the exercise of their professional knowledge, and induce their brethren to enlist under their auspices for similar advantages and honours. If in due time the Institution should be thus formed and become popular, (which under good managements there is little reason to doubt) a considerable saving to Government might be anticipated. The monthly stipend, might in the course of time, be considered an unnecessary inducement for pupils entering the Institution. A considerable reduction might be made in the European medical service, as the Native Doctors would become competent to take charge of Native corps. The present expensive and useless (because it has never been carried on to the required extent) system of translating medical tracts, might also be conducted by Natives, without costing the state scarcely anything. The services of natives for that purpose could be procured at reduced though adequate salaries. There are other objections to European Professors. The difficulty of filling up vacancies in case of death or absence. For it would be very difficult to find men competent to the task

of lecturing, at a moment's warning. The most efficient would be found only among the juniors of the service, as they are freshest from the schools, and the appointment of young men on high salaries might excite a feeling of jealousy among the seniors. Again, there is no security that in the event of a vacancy, private interests might not fill the appointment. If once incompetent persons were made professors the Institution would be ruined. Lastly the great expense of European Professors.

But how are we to get qualificd native professors? By no other means than those adopted so successfully by the Pasha of Egypt at the instance of Clot Bey, by sending in the first instance a certain number of Native students to England, there to enter the Hospitals and undergo the regular course of Medical education. That intelligent Natives having a good knowledge of the English language, and possessing good elementary acquirements, could be found to go to England there is little doubt. We have the opinion of Mr. David Hare on this subject, who says he knows many who would gladly avail themselves of an offer to go, provided their expences were paid. In a word, it is his conviction that there would be no difficulty in procuring the necessary number, and between Mr. Duff's school and other seminaries in Calcutta, it is our own impression that boys sufficiently qualified would be found as volunteers, in a path that must lead to certain distinction, and open to them new and brilliant prospects in life.

From all the evidence before us, we have not a shadow of doubt, but the prejudices of the natives against the practice of human dissection would soon be as successfully got over in Calcutta, as they were at Cairo by Clot Bey. The Vaid students at the Sanscrit College, would be glad to avail themselves of opportunities to acquire a knowledge of practical anatomy tomorrow, if the thing could be managed in secret. They have themselves entirely got rid of their prejudices on this head, and their wish to cultivate such pursuits in secret, is merely a sacrifice of policy to the prejudices of those among whom they are to acquire their bread: for if it were known generally that during the hours of tuition, they touched a human bone, much less a dead body; it would create a repugnance to employing them, that must end in their ruin.

The following extract from the Lancet of March 1833 respecting Clot Bey's proceedings in Egypt; are so pertinent to the subject under consideration that we trust to be excused for bringing it under your Lordship's notice.

"The tact of CLOT-BEY in explaining away and removing the prejudices, both of the priests and the people, against dissection, evinces a sagacity and plainness of purpose for which he deserves high praise. The pupils whom he had to instruct, had, for the most part, been educated in the mosques. Hence, in their opinion, the touching of a dead body was an irreligious act. How, then, could he imagine, that they would be induced to dissect, though without anatomy there could be no science of medicine? At this moment of perplexity, the VICEROY was appealed to, who, though favourable to the innovation, was unwilling to risk an open rupture with the prejudices of the community. Thus situated, CLOT-BEY took the desperate resolution of appealing to the Ulemas themselves. These persons were not slow to perceive that, in appropriating to themselves the practice of a useful science, they would thereby augment their own credit and influence. Many conferences were accordingly held, and many objections had to be removed, before even their tacit consent could be obtained to the project. The Ulemas believed that the dead body suffered by the mutilations of the scalpel. To this it was answered, that if such were the case, the deceased must suffer equally from the worms. In the latter case, the sufferings of the dead body were as inevitable as useless, it was therefore suggested that it must be better to substitute for this mode of suffering, another one which would have the good effect of enabling living men to employ means for their own preservation when diseased. It was further shown, that this end was to be obtained by diffusing a knowledge of the structure of the human body,—as, when a watch was out of order, its movements could only be restored by a person acquainted with its mechanism, &c. By such arguments the Ulemas were disarmed, the pupils were then soon reconciled to the study of anatomy, and all Cairo heard, without being agitated, that dissections were performed at Abouzabel, and thus did the founder achieve his purpose, despite a thousand ardent and dangerous enmities. Some of the Ulemas, to their honour be it told, now rank among his most efficient assistants, and the vocabulary already mentioned is, in part, the work of one of these individuals—the Seid Ahmet Er-Rachidi.

From the foundation of the school, to the year 1831, one hundread and fifty capable and well educated doctors have been sent forth to practice. The cholera broke out in Egypt in the course of that year, and the conduct of these fresh disciples, under the trying circumstances of the epidemic, was truly heroic. Its ravages were frightful. Most of the Europeans, and many physicians, fled, while the young practitioners were indefatigably rivalling their seniors in zeal. They remained at their posts, and thirty of them became victims to their devotedness.

CLOT-BEY has not only established a school of medicine on the confines of the desert, but he has also taken the only measure by which the work, so well begun, can be perpetuated—namely, that of furnishing the chairs of the institution with national professors. With this view he has taken to France twelve Arabs, chosen for the superiority of their capacities, who are to perfect themselves in the respective departments of the professors whom they are destined to succeed.

In every point of view, the foundation of this school is an important conquest for civilization.

The science of medicine is so based entirely upon the other branches of human knowledge, that the establishment of good and comprehensive medical institutions may be regarded as the most important step towards the diffusion of knowledge in general. The upper and middle classes of the nation in which such institutions exist, cannot long remain an ignorant and enslaved people. Let this be remembered, when the constitution of our medical corporations shall be duly investigated."

There is a circumstance connected with the Institution at Abouzabel which the opponents of the English system of education recommended by the committee, might perhaps advert to with exultation, as furnishing a strong argument upon their side of the question; it is that he and the other Lecturers deliver their prelections in Arabic. Now the moment we learn the *cause* of this circumstance, will its value as a make weight on the opposite side of the question disappear. Let us hear Clot Bey's own version, of his reasons, for adopting the Arabic as the medium of Instruction.

"Great obstacles," he states, "stood in my way; one of the first was to decide on the language to be employed in teaching. It was impossible to find pupils acquainted with French or Italian; besides, the time it would have required to teach them, and other motives, convinced me of the necessity of teaching them medical science in their own idiom. Once determined on this point it became necessary to find, for Professors not acquainted with Arabic, the means of transmitting their ideas. This I thought might be effected by employing translators who were acquainted with the languages both of the pupils and their masters, and which translators should themselves be pupils, destined to teach hereafter what they were now to learn"

This completely alters the aspect of the matter for we find Clot Bey not acting from choice but an imperious necessity.

"It was impossible to find pupils acquainted with French or Italian." Were the circumstances precisely similar here as in Egypt, we should adopt the same line of conduct as Clot Bey did, and deliver the Lectures in the most popular language, of the country, the Hindoostannee. The case however, is widely different, for here there is no difficulty whatever in getting Native *pupils* acquainted with English.

Were the plan adopted, which we strongly recommend to your Lordship, of sending home a certain number of pupils to study in England; it would be necessary that they should be in the acquirement of professional knowledge for five years before they could obtain their diplomas. This would afford time for maturing an Institution in Calcutta, under charge of three European professors and a Superintendent or Rector; so that when the education of the native students sent to England should be completed they would be able, on their return to this country, to do duty as assistant surgeons at once, and as the European Professors retired or died off they could step into their chairs, succeeding them on reduced salaries. In this way a constant succession of Native Professors could be kept up. The cost of sending Eight Native young men to England and of their education on a liberal scale for the term specified, would be about £10,000.

We have thus endeavoured to the best of our ability to execute the task which your Lordship did us the honor to entrust to us. We have avoided in reference to the plan proposed, for ameliorating the system of Native Medical education, to trouble your Lordship with details; should the general scheme meet your Lordship's approbation these could be duly entered into afterwards, by a Committee selected for the purpose.

(Signed) J. GRANT, *President.*
J. C. C. SUTHERLAND
C. E TREVELYAN
THOS. SPENS
RAMCOMUL SEN
M. J. BRAMLEY
} *Members.*

APPENDIX.

[EXTRACT FROM PAPERS SUBMITTED TO THE COMMITTEE BY MR. TYTLER.]

List of Questions propoesd by the Medical Board to the Pupils during their examination which appear to be unsuitable.

I. *Questions relative to the Fœtal circulation.*

Describe the Fœtal circulation?

How does the blood return from the Placenta?

Does all the blood of the umbilical vein go to the liver?

Does all the blood of the Fœtus pass through the Ductus Venosus?

Where does the blood go to which does not pass through the Ductus Venosus?

Where does the blood go to when it passes from the umbilical vein to the substance of the liver?

What is the course of the Ductus Venosus, what part of the heart does it enter?

In which part of the Vena Cava does the Ductus Venosus terminate?

Where does the blood which enters the heart of the Fœtus by the Vena Cava go to?

Where does the blood go to from the right auricle of the Fœtus?

Does it all go to the right ventricle?

What is the name of the Foramen between the right and left auricle of the Fœtus?

What is the Foramen Ovale of the heart?

Why does not the blood go back by the Foramen Ovale from the left to the right auricle?

Is there a valve in the Foramen Ovale?
What valve is there?
Where does the blood go to from the right ventricle of the Foetus?
And from the pulmonary artery?
And from the lungs?
Where is the origin of the Ductus Arteriosus?
And what is its course and termination?
Does the Ductus Arteriosus exist in the adult?
Where does the blood go to in the Fœtus which does not pass through the Ductus Arteriosus?
What becomes of the Foramen Ovale in h e adult?
And of the Ductus Arteriosus?
And of the Ductus Venosus?
Is there any difference between the venal and arterial blood of the Fœtus?
How is the blood changed in the placenta?
Does the blood in the lungs of the Fœtus become red by oxygen?
By what does it become red.
How does the blood go from the uterus to the placenta?

II. *Questions on other parts of Minute Anatomy.*

What is the Torcular Herophili?
Where it is?
Where does it go to?
And the circle of Willis?
What is the circle of Willis?
What is seen in the lateral ventricles of the brain?
What is the anterior commissure of the brain?
What two things is it between?
Where is the Lyra?
How many corners have the lateral ventricles?
What is the Arbor Vitæ?
What are the sinuses of the brain?
What is the course of the lateral sinuses?
What are the contents of the lateral ventricles?
What is the foramen of Monro?
Is it behind or before the commissure?
Whence does the infundibulum arise from?
Where does it go to?
Is the corpus striatum or Thalami nervorum opticorum in the anterior part of the lateral ventricles?
What is between them?
What is the plexus choroides.
Where is it?
What is the Fornix?
Where is it?
What is the Pes Hippocampi?
How many horns have the lateral ventricls?
What are they?
What is the Corpus Callosum?
Where is it?
From what part of the brain do the olfactory nerves arise?
And the optic nerves?
What is the meaning of the word Tunica Arachnoides?
What are the convolutions of the brain?
Does the Tunica Arachnoides enter between the convolutions of the brain?
Does the Pia Mater go between them?
How many hemispheres are there?
What are their names?
Into what parts is the brain divided?
What is the meaning of the word Cerebrum?
What is seen when the brain is cut on a level with the corpus callosum?
Where are the lateral ventricles?
What are they?
Where are the thalami nervorum opticorum?
Where are the corpora striata?
Where is the anterior commissure?
Where is the calamus scriptorius?
How many substances are there in the brain?
What is the colour of the cerebellum?
What is the cortical substance?
What is the name of the substance within it?
What is the meaning of the word cortical?
What is the centrum ovale?
What is seen by cutting it?
Between what things is the septum lucidum?
Is there any commissure between the thalami nerorum opticorum?
What is before the commissura mollis?
When the thalami nervorum opticorum are separated what is seen between them?
What is the Pineal gland.
How many holes are there in the Tympanum?
What things are found in the ear?
Where is the stapes?
And the malleus?
What is the relative situation of the artery and vein when passing through the triceps muscle?

Examination of Dursun Singh (110) *Pupil of the Native Medical Institution before the Medical Board, March* 9, 1882.

This Pupil was rejected.

Describe the circulation of the blood?
Why does not the blood return?
How many valves are there in the heart
Describe the Fœtal Circulation?
What is the origin and termination of the Ductus Venosus?

He was then desired to withdraw, and after the examination of two other pupils was again called in.

Describe the circulation of the blood

Are there any valves in the heart ?
What are they.
Whence do the coronary arteries arise ?
What is their use ?
Describe the Fœtal Circulation ?
What is the Foramen Ovale ?
When the blood enters the heart from the Vena Cava where does it go to ?
Where does it go from the right auricle of the fœtus.
Where is the origin and termination of the ductus arteriosus
What are the symptoms of Diarrhœa and of Dysentery ?
If a man's hands and feet are swelled what is to be done ?
How many ways can the Humerus be dislocated ?

JOHN TYTLER
Supt. Nat. Med. Inst.

EXTRACTS FROM THE ANSWERS OF MR. TYTLER TO THE COMMITTEE'S QUESTIONS.

Q. 41. Will you kindly state the course of study for the first year ?
Q. 42. The same for the second year ?
Q. 43. The same for the third year ?

A. The shortness of the time during which the Pupils remain in the Institution prevents my dividing their studies according to years, I am obliged to do so according to their standing in the school however short that may be. The Committee will also be pleased to remember that I must suit the course of Tuition to the Medical Board's examinations, and instruct the Pupils in those matters on which they are likely to be questioned there without reference to my own opinion as to their practical ability. The miscellaneous nature of the questions indeed necessarily leaves me little time for teaching much else than the answers to them. Besides which, it must be remembered that the Pupils will always be more anxious to learn what is to enable them to pass their examination immediately, than what is merely recommended by me as likely to be eventually useful, but of which no notice will be taken in the mean time. From all those causes, the following is to be considered as not the course which left to my own judgment I should prefer ; but as that which the above circumstances combined with the extreme scantiness of the means of Instruction compel me to adopt. The 4th. or youngest class begin with the reading of all the Treatises on Anatomical subjects. These, it must be confessed, are very inadequate. It is necessary however to give the pupils a general idea of their contents and also to exercise them in reading, in which as the committee will have already observed, so many are sadly deficient I then commence the reading of the Anatomical Tracts which I have myself compiled which are still in M. S. but of which I get manuscripts made by slow and laborious degrees. While I am doing this, I demonstrate Osteology on the Human Bones, I then show the Thoracic, Abdominal and Pelvic Viscera the principal blood vessels and nerves ; and as many of the large muscles as can be with the body of sheep, explaining the Physiology as we go on. In the 3d class or that of Materia Medica I commence by reading the translation of the Latin Edition of the London Phamacopeia and the tract on the medicines procurable in Hindoostan by Dr. Ramsay. I then commence my own M. S. which comprise first a short Introduction to Chemistry, in reading which I exhibit a certain number of experiments calculated to familiarize them with the principles of that science and with those facts in Pneumatic Chemistry, on which they are likely to be examined. I then proceed to read the remainder of my compilation which consists of an account of the nature and properties of the most useful medicines, exhibiting at the same time, and causing them to distinguish specimen of the articles themselves, with most of which their attendance at the Hospitals, &c. has by this time made them familiar. With the 2d class I read all the printed Tracts on subjects connected with the practice of Physic and then proceed to my own M. S compilations. With the 1st. class I pursue the same course on matters relating to Surgery.

The 4th. 3d. and 2d. Classes I examine on the subjects of their several studies. The 1st class I generally interrogate on the questions comprized in the Medical Board's examinations, and explain those which they are unable to answer.

The 4th. class attends the Native Hospital, the third the Hon'ble Company's Dispensary, the 2d the Branch Dispensaries of Colingah and Guronhutta, and the 1st the General Hospital, the Eye Infirmary, and Superintendent of Vaccination.

Q. 99 In the system of academical tuition which you have pursued have you found it necessary to instruct the pupils, in any minor, or less important branch of study ; with a view to enable them to answer questions which the Board of examiners are in the habit of putting ?

A. I have been obliged to instruct them in many points, which I should have considered quite unnecessary, except to enable them to pass their examination at the Medical Board.

Q. 117. Do you think it expedient or possible to establish a more comprehensive system of Medical education for native Doctors, based upon a capability of reading and writing English ?

A. I think very great pains were taken and much time allowed, that it might be possible to establish a system of education through the medium of English, to a partial extent with a few particularly intelligent individuals; but I do not think this system would be in the least more comprehensive nor by any means so much so as one carried on in the native languages. I consider it wholly inexpedient as a general measure and indeed as a useless struggle to overcome impossibilities.

The difficulty of procuring good masters is too universally felt to require me to dwell upon it. I shall merely mention few of the necessary qualifications. First the master must be perfectly well acquainted with his own language and literature, he must understand English, not merely for the common purposes of reading and writing, but in the philosophical manner I have above described he must be acquainted with the sources of its vocables and the origin of its idioms. He must be thoroughly imbibed with the principles of universal Grammar and literary composition. Without those he may instinctively perceive and point out an individual error; but, he will never be able to explain to his pupils why it is so, nor teach them to avoid similar errors in future. He must be familiar with the circle at least of English classical literature, so as to be able to illustrate his doctrines by appropriate examples. He must be fully master of the language of his pupils, what, indeed, can be imagined a greater absurdity than for one who does not understand the language used by his pupils, to undertake their instruction; to undertake the explanation of words he has no words to explain them by, and to pretend to teach a language when he virtually declares himself either unwilling or unable to learn. A mason might as well undertake to build a house without stones or bricks, or a carpenter a vessel without timber. If the pupils be Mahomedans the teachers must be master of Arabic, Persian, Oordhoo, if Hindoos of Sanscrit and Hindee, or Bengallee, and he must be able to compare the Syntax, Idioms and Etymology of these languages with those of English and the European dialects generally, and unfold in both the principles of universal Grammar. Lastly he must not possesss only knowledge itself, but the power of imparting it, talents for teaching and the power for communicating in an impressive manner, a variety of refined knowledge, to uncultivated minds ill qualified and not very well disposed to receive it, and lastly all these talents must be regulated by perfect equability of temper and steadiness of resolution not be provoked, disturbed, or diverted by native perverseness or apathy. Of the above requisites, high as they may be thought, non can safely be dispensed with, and just as much as any is wanting in an individual, in so far is he unfit for the office of a teacher.

It would be invidious to inquire how nearly the majority of persons employed in India to teach English approach to the above standard. That I shall submit for the committee's own consideration, and shall only further observe that the difficulty of finding a sufficient number of such masters as I have described, or even of persons at all resembling them, will be infinitely greater than any that exists in teaching through the medium of the Native Languages.

Extracts from the answers of the Rev. A Duff to the questions of the Committee.

Q. 20. Do you think it possible to teach Hindoo boys the principles of any science through the medium of the English language?

A. If there be one question which I can answer more peremptorily than another, in the affirmative; it is this. I came to India prepossessed in favour of the practicability of this object; but mine was not the pre-poession of prejudice or of theory, it was rather the result of experience. Others made the subject a question; I had been accustomed from infancy to see it solved by indubitable facts. As this is a matter, on which it is desirable to have the clearest ideas, I shall shall take the liberty of extracting part of a printed statement which was written by me three years ago. With a few alterations it is as follows. To inexperienced persons the truth of the assertion, that, for the aecomplishment of the object proposed, "the constant medium of instruction must be English." may not appear at first sight so self-evident as it does to those who are on the field of labour.

The case stands thus. For the general mass, the vernacular language alone is as sufficient, as it is indispensable. The futilily of the attempt to supplant the native language by the universal introduction of a foreign tongne, can only be surpassed by its extravagant absurdity. No such attempt shall we ever sanction, far less advocate, or propose. What we mean to assert is, that, while it is acknowledged that the native language alone is available far imparting an elementary education to the mass, this language does not afford an adequate medium for communicating a knowledge of the higher departments of Literature, Science, and Theology. No original works of the description wanted, have yet appeared in the native languages: and though much of a highly useful nature has been provided through

European talent and perseverance, no translations have been made in any degree sufficient to supply materials for the prosecution of the higher object contemplated. Neither is it likely in the nature of things, that, either by original publications, or translations of standard works, can the deficiency be fully or adequately remedied for such a number of years to come, as may leave the whole of the present generation sleeping with their fathers. What then is to be done? We may not be able to assert positively what is to be done, but we can tell what has been done in a parallel case, and what we conceive ought now to be done, if men be not ashamed to confess that they are not too old to imitate.

Without degenerating into those fearful excesses of Idolatry that deluge and pollute the fertile plains of India, it may with truth be said that, in respect to general ignorance and superstition, the Highlanders of Scotland, about 60 or 80 years ago, somewhat approximated to the present condition of the people of India. Now, how was moral, spiritual, and intellectual life infused into the minds of the hardy descendants of the feudal chieftains and roving warriors of the north? Was it by an universal attempt to substitute English in place of the language of Ossian, who sung the tales of other years? Or, was it by exclusively confining the efforts made, to the importation of knowledge through the medium of the indegenous language of the Highlanders? No, it was neither by the one mode, nor by the other. The Scotch were far too sagacious not to perceive, that the former attempt would be irrational and fruitless, and that the latter would be equally unproductive from the want of works adapted to the noble purpose of achieving a nation's emancipation from the shackles of ignorance, and the tyranny of superstition. What then was proposed to be done! A middle course was proposed and gradually adopted. While translations were made into the native dialects, and the elements of useful, and especially religious knowledge were taught, facilities were very widely afforded for the acquisition of the English language. And young men of promising abilities were encouraged to pursue those studies, so auspiciously commenced, from the prospect thereby held out, of their being able greatly to ameliorate their own condition, by being qualified to enter with advantage into honourable services at a distence from home, or to become the respected Instructors of their friends and countrymen Many, accordingly, from the parochial schools went to Academies or High-schools in the county towns, and thence many found their ways to the universities. Now, let it be specially marked, that, to these young Highlanders, English was just as much a *foreign language* as it can be to the native youth of Bengal. And many, and appalling were the disadvantages under which they laboured, when first made to enter the same field of competition with their more highly privileged class fellows of the South. But diligence and perseverance generally overcame all difficulties, and, not unfrequently, were the sons of the North found to bear away the palm triumphantly from their Southern compeers. And, what was the final result? Verily, it was no empty parade, no insignificant pretention. While numbers indirectly exerted a beneficial influence over the neighbourhood from which they sprung, numbers more, by becoming teachers and ministers of the Gospel &c. &c. returned richly laden with the spoils they had accumulated in a foreign territory, and, betaking themselves to the direct task of transmitting these into materials, bearing the stamp and superscription of their mother tongue, they dispersed far and wide the odours of sweetest incense enkindled at the shrines of learning, or scantified at the altars of piety, amongst the thousands of a delighted, and edified, and admiring population.

The application of these remarks, in their entireness and literality, to the present subject, is so evident, that we shall not waste time in formally making it. We simply desire that that progress which has been crowned with such ample success in our native country, may be forthwith instituted in this distant land,—that, while provision may be made for giving instruction to the many in their native tongue, to the utmost extent it is practicable or judged desirable, facilities may also be afforded for the acquisition of the English language, that, through a medium so advantageous, the promising few may be directed to the higher departments of Literature, Science, and Theology, that, drawing largely from the inexhaustible fountain, to which they are now supposed to have access, they may be enabled more widely to diffuse its vivifying and healing waters over the wastes of a dry and parched land.

Nothing but a sense of the overwhelming importance of this subject, as regards the future welfare of India, would have induced me to dwell so largely upon it. And I have only to add that the experience of the last three years has, if possible, *confirmed me in the conviction, not merely that, it is possible to teach Hindoo boys, the principles of any Science through the medium of the English language, but that, in the present incipient state of Native improvement, it is next to*

impossible to teach them successfully the principles of any science, through any other medium than that of English,

Only let us imagine the case of two boys:—one of whom has spent, say, five or six years in the study of English, and the other, the same number of years, in the study of Sanscrit, Arabic, or Persian. And let us ask a man who *knows practically, and not theoretically*, the present altitude of things in Hindoostan, to which of these two would he sooner undertake to impart a knowledge of modern Literature and Science? I believe the reply would be, that he would pledge himself to communicate more to the English student in two or three years, than to the Sanscrit, Arabic, or Persian student, in a whole life time.

Extracts from Mr. Hutchinson's replies.

Q. 5. Were there not 14 pupils admitted into the Native Medical Institution in March 2d, 1832, by order of the Medical Board.

A. Very probably.

Q. 6. Was not an objection taken to several of them by Dr. Tytler?

A. Yes.

Q 7. Did not Dr. Tytler address the Medical Board officially on the subject of their admission?

A. Yes.

Q. 8. Were his suggestions attended to by the Board.

A. They were immediately attended to, to the extent that it was possible. The Medical Board, finding that in the emergency of the occasion, their places could not be supplied by individuals of superior qualifications.

Q. 24. Is there any rule (*on admission of candidates*) respecting age.

A. I believe by the General Orders there is a rule, but the Medical Board generally select them between the age of sixteen and nineteen.

Q. 25. Is there any qualifying standard?

A. None, except that he shall be able to write a good hand and be able to read a Native book with fluency.

Q. 29. Is the Superintendent consulted regarding the admission of candidates?

A. The plan has been tried; but not found expedient.

Q. 34. In your opinion is the knowledge of Anatomy possessed by the students superficial or otherwise?

A. Superficial.

Q. 43. Have the students ever had the advantage of seeing the circulating system illustrated by injection.

A. I am not aware that they have

Q. 44. Then they can scarcely be supposed to have very accurate notions of the course of Arteries and Veins?

A. Perhaps not, except what they can obtain from the Anatomical models.

Q. 45. How are the final examinations by the Medical Board regulated—on the application of the student himself, or the report of the Superintendent?

A. Neither the one nor the other; they are generally chosen by seniority provided there is no reason to the contrary, and are not taken from the school, but when Native doctors are required for the service.

Q. 49. Are the examinations understood to be open or the contrary?

A. I am not aware, that any persons are prevented attending, though I should think, strictly speaking, the examinations are considered to be close at present.

Q 50. Was there any objection ever made by the Board to the Superintendent's taking notes of the examination?

A. I am not aware that any public objection was taken, though I believe the Medical Board had a great repugnance to his doing so.

Q. 51. Why?

A. To prevent the possibility of his teaching them a series of questions by rote, for the purpose of enabling the pupils to pass their examinations, and because it could answer no good purpose, and was an extremely poor return for the Board's courtesy in admiting Dr. Tytler.

Q. 54. The object hitherto proposed to be attained, has been to educate subordinates to act under the immediate eye of the European Medical officers, with a view to which, they are taught only the most necessary and intelligible parts of Medical Science. It is now proposed that the Native doctors should act on their own responsibility in the independent charge of jails and hospitals, and of the smaller civil stations. Do you conceive that the education hitherto imparted will be sufficient to qualify them for their new functions?

A. Certainly not.

Q. 71. Supposing the establishment of a comprehensive system of Medical education for Native doctors; how many professors do you think would be necessary?

A. If it is proposed to teach the students Anatomy, Materia Medica, Surgery and Pharmacy, Medicine and Medical jurisprudence, there ought to be five; because I conceive that to teach these branches of science in the most effective manner, a separate professor would be required for each.

THE INDIA
JOURNAL OF MEDICAL SCIENCE.

CALCUTTA, MARCH 1, 1835.

The paper, on the climate of *Kumaon* and its productions, is one of which, it is to be wished, that a series could be provided, embracing the meteorology, and general natural history of different tracts and provinces of India, no less than their medical topography and statistics. Were some of our subscribers in various quarters of the country to take this subject into serious consideration; much, that is not now, perhaps, even thought of, might be done, for the improvement, no less of our peculiar profession, than of the common interests of humanity. Each, as his opportunities served, might if so disposed, favour us with the results of his experience, or observation, within the circle of his sojourn or service; and in this way, a large stock of valuable information could be accumulated, that would scarcely fail to add to general knowledge, if not perhaps lead to fresh discoveries in the field of pathology, and remedial medicine.

It is well known to the Indian practitioner, that stations for many years deemed healthy, for European and Native troops; all at once as it were, and without any obvious causes, assume a totally contrary character. It would surely be interesting, in contingencies of this nature, to ascertain, if possible, the essential agents of such changes, in order to anticipate their advent, and if in our power, neutralize their activity. Medical Topography indeed, is a branch of the science, it is to be feared, but little attended to; for too often, the Medical officer, however high his talents, extensive his experience, or undoubted his skill, is not consulted as to the location of an encampment, or the site of a cantonment. Had it been always otherwise, we should perhaps have heard less of the mortality under a Schomberg at Dundalk, or under a Morrison at Arracan; Calcutta perhaps would have occupied a very different area; and Berhampore, and Cawnpore never been heard of, as permanent stations for troops.

Not inapplicable for introduction here, are some queries that follow on the part of Mr. Malcolmson, the zealons and intelligent Secretary of the Madras Medical Board; for whose kind interest in our behalf, distant though he be from the scene of our labours, we beg to tender our cordial acknowledgements. The queries alluded to, are in themselves, of a nature to attract attention; and we are not without hopes of receiving satisfactory answers to them, from some of our active correspondents, who may have had more favorable opportunities for observation, in the tract indicated, than ourselves. Mr. Malcolmson says,

"I think it would be interesting to obtain information regarding the local prevalence of guniea worm, of which as it prevails in Bengal little or nothing is kn own. It is singular that it is knowu in this Presidency, chiefly in the Bellary zillah, which is contiguous to the South Mahratta country where it is so prevalent."

* * * * *

At what price can the sulphate of the salt obtained from the neem tree be furnished? Which species of the plants known as such, affords it? The genus is not well ascertained and I understand the two trees often considered the same, require to be separated into *two new genera*. There is a subject of much importance to which I think attention might be profitably directed, viz. the effect of change of climate on the health of the Native army. The diseases that are produced by the change from the dry climate of Hindoostan to the moist one of Bengal, and vice versa; to the hills, to the stations towards Ava, to Cuttack, &c. These remarks should be directed to the *general* effects exclusive of febrile causes—the period of residence necessary to produce them, the time in which the men become habituated to the new climate, and the period necessary to restore the health of a regiment, which has been deteriorated by residence or service in an unhealthy station."

Thankful, as we unfeignedly declare we feel, towards our kind correspondent "KIRKMICHAEL," for his active support of our journal; yet are we free to confess, that we should have been better pleased, had the pen been less trenchant, in his last sketch, than we fear it may be deemed. We have no personal acquaintance whatever with Professor Badham, and therefore can scarcely be suspected of being swayed by prejudice for or against him. It has nevertheless struck

us, since the article was printed, that the tone of our worthy contributor has been unnecessarily severe. It is true, that a public character, is to a certain extent, public property, and is therefore open to free comments upon his public conduct or bearing. Nevertheless, there is a measure of liberality and amenity always to be naturally looked for, when a professional man reviews his Brethren. We do not say that our correspondent has overstepped the line of this, but a most sincere desire to avoid giving cause of offence, more especially to those who are far distant, and therefore the less able to justify themselves, impels us to remind our good friends who may be disposed to help us, that we shall always value their contributions the more, in proportion to the generosity of feeling and delicacy of allusion that may characterise them.

For sometime past, the streets of Calcutta have been in a most uncomfortable state, from not having been watered as heretofore. Unless some steps be taken to remedy this evil, we fear that in the hot weather it may prove destructive to health. In our present number are contained some cases of Apoplexy at Chunar, brought on by the heat of the sun, helped no doubt by the reflected heat and glare from the ground; and the Calcutta reader can scarcely fail of being struck with some degree of apprehension, lest fever with great cerebral excitement, if not apoplexy itself, may be produced here likewise, if similar causes are allowed to remain in full force.

We have not, nor do we desire to enter upon the points in dispute, which have occasioned the suspending of the accustomed and necessary watering of the public streets; but most assuredly the act itself, is one fraught with a responsibility, that may assume a more awful character, than is now perhaps dreamed of. If it were a question of mere comfort, it would be another matter, but when it involves probabilities of disease and death, it assumes an importance of a grave character, more especially when we recollect, that the evil falls with accumulatted severity on the humbler classes.

The state of the drains too, is such as daily to make itself sufficiently manifest to the sense. At times, the most frequented of our streets are from the impure state of the drains, even absolutely offensive. That this cause, is one that operates materially in the production of disease is so well and generally known, that it would be superfluous to enlarge upon it. Should if be requisite, we shall probably return to the subject.

We fear that our kind contributor Mr. Lindsay of Chunar, will be disappointed, at finding our notice of his paper a very meagre one. In fact, we have little or nothing to add to his own clear and striking account of a disease, which makes a residence at Chunar, during the hot season, not very enviable. In the natural situation of the place, geologically and generally considered, we see at once that it must be a very hot one, and in that simple fact we conceive, consists the leading cause, of its being an unhealthy one. The study of the pathology of the brain, as Dr. Quain has justly remarked, is only in its commencement, and the surest method of acquiring greater power of discrimination, is to avail ourselves cautiously of the information and experience of those who have already been labouring in the field, and to bring to the further investigation of this intricate subject a spirit of careful observation and strict induction. As a general title, we see no objection to Apoplexy, or Coup de Soleil, though in the course of the disease the diagnosis may assume a more specific form. In regard to practical measures, the question of chief interest to solve, would strike one as being; is this an inflammatory affection of the brain, or its investing membranes? On this question mainly depends the free use of the lancet. Mr. Lindesay, who now has had much experience in the Chunar form of apoplexy, evidently has no confidence in blood letting, for a very good reason, that he has seen no benefit derived from it and has often seen it accelerate the fatal event. The pro-

bability is, that in concurrence with this opinion, most practitioners would be much inclined to let the lancet alone, and trust to stimulants and counter-irritation. Is there any cause, (not mechanical) enquires Dr. Clutterback, capable of influencing the sanguiferous system of the brain exclusively, so as to paralyse, as it were, its blood vessels, and thereby put a stop to the movement of blood in that organ? Is apoplexy ever induced in this manner? Has carbonic acid or any of the narcotic tribe such a power? We incline to answer these qneries in the affimative, for the narcotic, alcohol, does appear under certain circumstances, to possess such power. There is perhaps no disease, observes the same distinguished writer, the treatment of which requires so much to be directed by theory or general principles as apoplexy. "The practice in general use is, for the most part, unnecessarily violent, and in some respects contradictory. Blood letting to an unreasonable extent, vomiting, purging, blistering, sinapisms, and a variety of other stimulants, have all been administered with an almost indiscriminate and unsparing hand; as if to insure recovery, it were only necessary to have recourse to sufficiently active means, without much regard being paid to their nature or effects. The treatment becomes, thus needlessly complicated and severe; and there is reason to believe that the end sought after, is often thereby frustrated rather than promoted. It is necessary, in order to practise with success, to look not only to the symptoms, but to the intrinsic nature of the affection, and more especially to the remote causes by which the disease was induced, the obviating of which is the principal object of attention in the cure." As is too frequently the case in other diseases, there is great reason to suppose, that morbid action of a mischievous character, has been going on for some time before those tremendous symptoms appear that make the patient's friends send for the medical man. If the former were not of so insidious a nature as seldom to excite suspicion, it would constitute that stage when the aid of art would be almost sure to succeed. As matters generally turn out, the affection has almost done its worst, or ended in effusion, or paralysis of the cerebral mass, before recourse is had to the physician. The subject altogether is full of interest; but at present we have neither space nor time to spare, to enter upon it as we could wish. We shall be happy to see the topic resumed by Mr. Lindsay himself, and other talented correspondents.

Having been applied to from various quarters, to give some information respecting the labours of the Committee appointed by Government, to digest a plan for the improvement of Native Medical Education, (the subject having occasioned much speculation in consequence of the formation of the new Institution placed under the superintendence of Mr. Bramley;) we sought the permission of the Right Hon'ble the Governor General, for the publication of the Committee's report, which was readily and kindly granted to us. The publication of the Document in our present number, has trenched so much upon our limits, that the usual selections from European medical periodicals, must necessarily stand over for the present. The plan recommended by the committee is quite of a general character, as we have reason to know that they purposely forbore entering into minute details, which could the more easily be embraced afterwards, should the leading suggestions they proposed be followed. At the same time that we cannot but regret that the scheme adopted is not so comprehensive as could be wished, yet is it highly gratifying to know that the main principle recommended by the committee, viz. the basing of Native Medical Education on practical Anatomy and the English language, has been acted on. This of itself is a great stride, and, we cannot doubt, will develope capabilities of improvement little dreamed of by those who stickle for the communication of knowledge in the oriental languages only. It would have been to ourselves a source of unfeigned satisfaction had a

more extensive plan been possible to be adopted, which would have secured the valuable services of the late Superintendent. Opposed as we have been, and conscientiously so, as to the means for reaching the common end in view, yet when we bear in mind the great zeal in the cause of native improvement, the solid learning, and the high character of Mr. Tytler, we are sorry to think that his convictions, sincere and ingrafted in his mind though they were, would seem to have in a manner, placed him in a false position, with reference to the march of improvement in the teaching of Medical Science to the natives. It is to be hoped that the success of the experiment now making, may alter his opinions, and that with renovated health, he may yet be found an active and powerful auxiliary in the cause of Native Education, which he has already served so long and ably.

Before concluding, we hope to be excused for stating that a good deal of uncertainty as yet prevails, respecting the working of the new Institution, more especially as to the duties of the Committee of Assessors, which are not, we respectfully submit, defined with sufficient explicitness. Precision on this and other points may prevent misunderstanding afterwards.

MEDICAL INTELLIGENCE.

GENERAL ORDERS RELATING TO THE MEDICAL SERVICE.

GENERAL ORDERS BY HIS EXCELLENCY THE RIGHT HON'BLE THE GOVERNOR GENERAL OF INDIA IN COUNCIL.

7th January, 1835. His Excellency the Right Honorable the Governor General of India in Council, has been pleased to permit Mr. Assistant Surgeon J. Corbett, of the Political Agency in Harowty, to remain in the Hills in the vicinity of Simla, and to be absent from his station from the expiration of his present leave (the 1st December 1834) till the 31st December 1835, on account of ill health.

The undermentioned Officer is permitted to proceed to Europe on Furlough.

Assistant Surgeon James Davenport, M. D., of the Medical Department, on Medical certificate.

No. 3 of 1835.—The Right Hon'ble the Governor General of India in Council has resolved, that the appointment of Superintending Surgeon at Allahabad be abolished, and directs, that the Superintending Surgeon at Cawnpore do conduct the Medical details of the troops now within the Allahabad Circle of Superintendence.

Rank is assigned to the undermentioned Cornets and Assistant Surgeons from the dates expressed opposite to their respective names :

Assistant Surgeon Keith Macalister Scott, 25th April 1834.

Assistant Surgeon Thomas Leckie, 25th April 1834.

The undermentioned Officer has returned to his duty on this Establishment, without prejudice to his rank, by permission of the Hon'ble the Court of Directors :

Surgeon John Allan, M. D., of the Medical Department, date of arrival at Fort William, 5th January 1835.

The undermentioned Officer is permitted to proceed to Europe on Furlough :

Assistant Surgeon Andrew Henderson, of the Medical Department, on Medical certificate.

Surgeon John Tytler, of the Medical Department, and Superintendent of the Native Medical Institution, is permitted to proceed to the Cape of Good Hope, on Medical Certificate, for two years.

13*th*. No. 10 of 1835.—The undermentioned Officer is permitted to proceed to Europe on Furlough :

Assistant Surgeon George Jackson Berwick M. D., of the Medical Department, on Medical certificate.

15*th*. No 12 of 1835,—Assistant Surgeon A. A. McAnally in Medical charge of the Establishment at Hissar, is appointed an Assistant to the Hissar Stud, with a Salary of Sonat Rupees (200) Two Hundred per mensem, in addition to the allowances at present drawn by him.

Assistant Surgeon J. Corbet, of the Political Agency in Harowty, was permitted, in the Political Department, under date the 7th instant, to remain in the Hills in the vicinity of Simla, and to be absent from his Station from the expiration of his present leave, (the 1st December 1834,) till the 31st December 1835, on account of ill health.

23*d*. Assistant Surgeon K. Mackinnon, M. D. attached to the Civil Station of Tirhoot, has obtained, in the Judicial and Revenue Department, under date the 10th instant, leave of absence for two months, on private affairs, in extension of the leave granted to him on the 15th September last.

28*th*. No. 23 of 1835.—The Right Honorable the Governor General of India in Council is pleased to make the following Appointment :

Assistant Surgeon Samuel Davies to succeed to the Medical charge of the Civil Station of Patna, under the provisions of the 2d Clause of General Orders No. 129, dated the 13th September 1833, in the room of Surgeon King, placed at the disposal of His Excellency the Commander in Chief.

No. 28 of 1835.—The Right Hon'ble the Governor General of India in Council is pleased to pass the following Resolutions :

1st. That, the Sanscrit College Medical Class, the Medical Class of the Mudrussa, and the Native Medical Institution, be abolished from the 1st Proximo.

2d. That, such of the Students of the Native Medical Institution as are now capable of passing their final examination, shall be appointed Native Doctors, and all the other Students of that Institution be transferred to the Native Corps of the Army upon their present Salaries, to become Native Doctors when represented to be duly qualified by a Committee of Medical Officers ; or, if not found qualified in two years, to be discharged.

3d. That, a new College shall be formed for the instruction of a certain number of Native Youths in the various branches of Medical Science.

4th. That, this College shall be under the control of the Education Committee.

5th. That, the Education Committee shall have the Assistance of the following Medical Officers,—Ex-Officio :

The Surgeon of the General Hospital,
The Surgeon of the Native Hospital,
The Garrison Surgeon of Fort Willam,
The Superintendent of the Eye Infirmary,
And the Apothecary to the Hon'ble Company.

6th. That, instruction be given through the medium of the English language.

7th. That, a certain number of Native Youths, whose ages shall not exceed twenty years, or be less than fourteen years, shall be entered upon the Foundation, as Foundation Pupils of the Institution.

8th. That, all Candidates for admission as Foundation Pupils, shall be required to present respectability of connexions and conduct, shall be able to read and write English and Bengallee, or English and Hindoostanee, and with these qualifications all Natives, between the age of 14 and 20, shall be equally eligible without exception to creed or caste.

9th. That, the Candidates shall be examined by the Education Committee and the Superintendent of the Institution, and that the selection of the Pupils shall be determined by the extent of their acquirements.

10th. That, the number of the Foundation Pupils shall be limited to fifty.

11th. That, the Foundation Pupils shall each receive a Monthly Stipend from the Government of 7 Rupees, which may be increased according to the following Rule.

12th. That, all the Foundation Pupils be divided into three Classes, each Class having a different Salary :

The 1st Class 7 Rupees per Month.
The 2d Class 9 Rupees per Month.
The 3d Class 12 Rupees per month.

13th. That, the formation of these Classes shall be entrusted to the Management of the Education Committee and the Superintendent of the Institution, it being distinctly understood, that the Classification will depend upon the acquirements of the Pupils, and not upon the period of their studies ; excepting, that no Pupil shall, during the first two years of being on the Foundation, receive a higher Salary than 7 Rupees per month, but that afterwards the increase will depend upon the Classifiaction.

14th. That, the Foundation Pupils shall be expected to remain at the Institution for a period of not less than four years, and not exceeding six years.

15th. That, all Foundation Pupils be required to learn the principles and practice of the Medical Sciences in strict accordance with the mode adopted in Europe.

16th. That, all the Pupils who shall have completed their Studies according to the form prescribed shall be entitled to have Certificates signed by the Superintendent, to enable them to present themselves for final examination.

17th. That, the final examination for granting Certificates of qualification to practice Surgery and Medicine, or, for admission into the Service, shall be publicly made by the Committee of Education, assisted by the Medical Officers abovementioned.

18th. That, such Pupils as shall be deemed qualified to practice Surgery and Medicine, shall receive Certificates of qualification signed by the President of the Committee of Education, and countersigned by the Secretary of that Committee and the Superintendent of the Institution.

19th. That, the Public service shall be supplied with Native Doctors from the Institution, and with a view to this object, whatever appointments may happen to fall vacant during the period which intervenes between two Examinations, shall be offered for the acceptance of the Students who pass at the Examination next ensuing. The selection shall be regulated by the extent of professional acquirement.

20th. That, as an inducement for Pupils of a respectable class to enter the Institution he pay of the Native Doctors, who shall have been educated at the College, and have received the Certificates of qualification, shall be 30 Rupees per month. After seven years' service their pay shall be 40 Rupees per month, and after 14 years' 50 Rupees per mensem. After 20 years' service they shall be entitled to retire upon a Pension, regulated according to the proportions granted to Native Commissioned Officers of the Army, if no longer capable of performing duty from age, disease or wounds.

21st. That the Education Committee shall be charged with providing a suitable building for the College, a Library, Anatomical Preparations, and all other objects of an indispensable necessity to the Education of the Pupils ; the expense being previously submitted for the sanction of the Council of India.

22d. That, the College shall be under the management of an European Superintendent, who shall devote the whole of his time to the interests of the Institution, and who shall not be permitted to enter into private practice, or to hold any situation that can in any way withdraw his attention from his duties at the Institution.

23d. That, the Superintendent shall be permitted to draw a Staff Allowance of 1,200

Sonat Rupees per month, in addition to his Regimental Pay and Allowances.

24th. That, the Superintendent shall be aided in his duties by an European Assistant, who shall draw a Staff Salary of 600 Sonat rupees per month, in addition to his Regimental Pay and Allowances.

25th. That, the European Assistant shall devote the whole of his time to his duties at the Institution, and that, he shall not be permitted to enter into private practice, or to hold any situation that can withdraw his attention from the interests of the Institution.

26th. That the European Assistant shall exercise no control over the management of the Institution excepting by permission of the Superintendent ; but that, he shall confine himself to the duty of assisting the Superintendent in the work of Educating the Pupils.

27th. That, the whole management of the Institution, the Charge of the Pupils, the mode of teaching, and all the arrangements shall be entrusted to the judgment and guidance of the Superintendent, under the control of the Education Committee.

28th. That, the Superintendent shall make Half-yearly Reports upon the state of the Institution to the Education Committee, by whom these Reports shall be forwarded with their sentiments, to the Government of India.

29th. That, the division of duties of the Superintendent and of the Assistant shall be made at the discretion of the former, subject to the control of the Education Committee.

30th. That, the Superintendent with the aid of his Assistant shall be expected to instruct the Pupils in Anatomy, Surgery, Medicine and Pharmacy, and to qualify them for Medical Charges, either Civil or Military.

31st. That, the Pupils shall visit to witness the practice of the General Hospital, the Native Hospital, the Hon'ble Company's Dispensary, the Dispensaries for the Poor and the Eye Infirmary.

32d. That, the Superintendent shall be supplied, under the direction and management of the Education Committee, with a certain monthly allowance of Stationery for the use of the Institution.

33d. That, the formation of a plan of Medical Education, and the Rules and Discipline of the Institution, shall be entrusted to the Education Committee.

34th. That, in addition to the Pupils on the Foundation, the benefits of this College shall be open to all classes of Native Youths between the age of 14 and 20, without exception to creed or caste, provided they possess respectable connexions and conduct, and can read and write English and Bengallee, or English and Hindoostanee ; and that all thus qualified shall, at the discretion of the Committee of Education, be permitted to attend the instruction at the College, subject to its discipline and regulations.

35th. That, the Superintendent shall draw a Pay-bill for the Establishment of the Institution, which shall be countersigned by the Secretary of the Education Committee, and shall annex to it a Nominal Roll of the Youths on the Foundation of and Establishments attached to the Native Medical Institution, and Voucher for the payment of the House Rent, both signed by the Secretary of the Education Committee.

His Lordship in Council is pleased to nominate Mr. Assistant Surgeon M. J. Bramley to the situation of Superintendent of the New Medical College.—Mr. Bramley's appointment to have effect from the 1st Proximo.

ORDERS BY THE RIGHT HONORABLE THE GOVERNOR OF BENGAL.

6th January 1835.—The following Officer has obtained leave of absence from his Station :

Mr. T. W. Burt, Assistant Surgeon at Furreedpore, for a fortnight, in extension of the leave granted to him on the 20th October last.

7th. The following Officer is placed at the disposal of His Excellency the Commander in Chief :

Surgeon George King, in Medical Charge of the Civil Station of Patna.

10th. Mr. K. Mackinnon, M. D. Assistant Surgeon of Tirhoot, for two months, on private affairs, in extension of the leave granted to him on the 15th September last.

17th. The following Officer has obtained leave of absence from his Station :

Mr. A. Wilson, Assistant Surgeon of Bauleah, for seven days, on private affairs, in extension of the leave granted to him on the 10th ultimo.

21st. The services of Mr. W. B. Davies, Assistant Surgeon, attached to the Civil Station of Gowahutty, are, at his own request, placed at the disposal of His Excellency the Commander in Chief.

27th. The following Officer has obtained leave of absence from his Station :

Mr. A. Smith, Assitant Surgeon of the Civil Station of Jessore, for a fortnight, on private affairs.

GENERAL ORDERS BY THE RIGHT HONORABLE THE COMMANDER IN CHIEF.

5th Jan. 1835.—The Cawnpore Division Order of the 6th ultimo, directing Assistant Surgeon W. P. Andrew, M. D., Officiating Civil Assistant Surgeon at Mynpoorie, to afford Medical aid to the Head Quarters and Right Wing 71st Regiment Native Infantry at that station, is confirmed.

8th. Assistant Surgeon W. P. Andrew, M. D., is removed from the 68th Regiment Native Infantry, and appointed to the Medical charge of the Artillery at Benares

The undermentioned Officer has leave of absence :

Medical Staff—Superintending Surgeon W. A. Venour, Agra Circle, from 2d March to 2d November, to visit Simla, on Medical Certificate.

The Dinapore Division Order of the 1st instant, appointing Assistant Surgeon J. Macdonell to proceed to Dum-Dum in Me-

dical charge of the 2d Company 1st Battalion Artillery, is confirmed.

Assistant Surgeon T. C. Hunter, now at the General Hospital, is directed to do duty with the Artillery at Dum-Dum.

12*th*. The undermentioned Officer has leave of absence:

3d Brigade Horse Artillery—Assistant Surgeon J. McRae. from 15th January to 15th March, to visit Mussoorie, on private affairs.

13*th*. Brigadier General R. Stevenson's Order of the 23d ultimo, directing Surgeon G, T. Urquhart, of the 7th Regiment Light Cavalry, to afford Medical aid to the General and Division Staff with the Force serving in Rajwarra, vice McRae, is confirmed.

14*th*. The Benares Division Order of the 5th instant, appointing Assistant Surgeon T. Smith, M. D., of the 8th Regiment Light Cavalry, to the Medical charge of the Troops and Civil Establishment at Mirzapore, during the absence, on leave, of Assistant Surgeon Campbell, is confirmed.

The Dinapore Station Order of the 5th instant, directing Assistant Apothecary J. H. Peter to remain at that Station and do duty with the 3d Company 5th Battalion Artillery, is confirmed.

17*th*. Sub. Medical Department—Apothecary G. D. Wiltshire, His Majesty's 44th Foot, from 15th January to 15th July, to visit Dinapore and Dacca, on urgent private affairs.

20*th*. Assistant Surgeon K. M. Scott, lately attached to the Civil Station of Purneah, is directed to do duty with the Artillery at Dum-Dum.

The leave of absence granted to Assistant Apothecary J. G. Scott, of the 2d Company 1st Battalion Artillery, in General Orders of the 29th ultimo, is cancelled at his request.

22*nd*. The Right Honorable the Commander in Chief is pleased to make the following removals and postings of Medical Officers:

Surgeon C. B. Francis, (on Furlough) from the 56th to the 57th Regiment Native Infantry.

Surgeon G. King (late Civil Surgeon at Patna) to the 56th Regiment Native Infantry at Dinapore.

28*th*. The Cawnpore Division Order of the 15th instant, directing Assistant Surgeon A. Chalmers, M. D., late Civil Assistant Surgeon at Cawnpore, to proceed to Mynpoorie, and relieve Assistant Surgeon W. P. Andrew, M. D., who has been appointed to the Artillery at Benares, is confirmed.

The Detachment Order by Captain E. S. Hawkins Commanding the Escort of the Honorable the Governor of Agra, under date the 16th instant, directing Assistant Surgeon W. B. O'Shaughnessy. M. D., on duty with the Detachment, to afford Medical aid to the 2d Troop 3d Regiment Light Cavalry, is confirmed.

29*th*. The following removals and postings are made:

Surgeon D. Renton, from the 10th to the 6th Regiment Native Infantry.

Surgeon P. Carruthers, (on Furlough) from the 6th to the 29th Regiment Native Infantry.

Surgeon J. Allan, M. D., from the 29th to the 10th Regiment Native Infantry.

Orders by the Honorable the Governor of Agra.

23*d Jan*. 1835. Doctor J. Stokes, Civil Assistant Surgeon at Humeerpore, has obtained three weeks' leave of absence from his Station, on urgent private affairs, from the 3d proximo.

TO CORRESPONDENTS.

With reference to the notice upon the cover of the 12th Number of this work, in which we stated that "In order to relieve their friends from the expense of postage upon contributions, the Editors will have great pleasure in receiving papers for The India Journal of Medical Science "*Bearing*," when they can so be sent; or, in other cases, in carrying the amount to the credit of their Correspondents, or paying it to an Agent in Calcutta." We have to request that our correspondents will make known to us any expences they may incur for postage; and point out to us any error we may have made in the sums deducted from the amount of their drafts, sent in payment of subscriptions for the present year.

The following communications have been received:

On the want of confidence in European Medical skill among Natives of India. By A. Campbell, M. D.

Dr. Esdaile in reply to Dr. Campbell's remarks on the "Formation of Fat in the Heart."

On the supposed Formation of Fat in the Heart, By A. Campbell. M. D.

Report on Cholera at Bombay: By R. H. A. Hunter Esq.

Cases of Pectoral Disease. By R. H. A. Hunter, Esq.

Case of Dislocation of the Lower Jaw: By C. W. Fuller Esq.

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ORIGINAL COMMUNICATIONS.

WRAY'S CASE OF ABSCESS OF THE BRAIN, &C.

To the Editors of the India Journal of Medical Science.

Dear Gentlemen,—I have the pleasure to send you herewith, a case of extensive Abscess of the Brain which occurred in the Hospital of the European Regiment, in September last; if you think the Case worth publishing in your ably conducted Journal it is very much at your service. I also send you the previous case of Hepatitis in the same patient should you think it worth adding.

I remain, Dear Gentlemen,
Yours truly,
O. WRAY.

Dinapore, Nov. 5, 1834.

Hepatitis.—James Robie, Serjeant, Grenadier Company, admitted 20th August 1834, aged 32 years, constitution good, has been six years in India

Aug. 28th.—Admitted last night with very acute pain in the right side, striking up to the shoulder, says he has been unwell for the last ten days, the pulse was quick and full, skin hot and dry, tongue furred in the centre, he was bled on admission ad deliquium and lost forty ounces, he afterwards had thirty leeches applied to the right Hypochondrium and took the medicine prescribed as follows, which has operated freely, motions of a very deep yellow colour mixed with green, the pain of the side is rather easier, but still feels it acute on pressure being made, pulse now 90, full and bounding, the skin hot but a little moist, tongue still furred.—Venesect. ad syncop. lost ℥xl.—App.Hirud No. xxx. Hypochond dextr. Fotus Calid. R. Hyd. Submur. gr. x.—Antim. Tart. gr. i. ft. Pil—Statim sumend. R. Haust. Jalap. c. ℥ij. 4 hours after.—28th Venesect. ad Syncop. R. Mist. Purg. ℥iv. Statim. R. Hyd. Submur. gr. v. Antim. Tart. gr. i. ft. Pil. ter quater die, Mist Febrif ℥ij. tertia quaq. hora.

29th.—Says he feels very much better this morning, but felt an acute stitch in the right side about the centre of the ribs in the night, but is again free from it, the pulse soft and little accelerated, tongue cleaner; skin moist.—App. Hirud. No. xxx. lateri dext. Cont. Pil. et. Mist. R. Mist. Purg. ℥iv. Statim.

September 1st.—Has been free from pain of the side for the last two days. Says he has no complaint except a little soreness of the mouth, bowels open, tongue clean, pulse soft, the pills were omitted on the 31st.—Utat. Gargar. Cont. Mist. R. Mist. Purg. ℥iv. Statim—Diet chicken stewed.

3rd.—Felt a good deal of pain in the right chest last evening, and has spit up a quantity of thick mucus tinged with blood during the day, and had a troublesome cough, his pulse was full and strong, he was ordered twenty leeches to the chest and took a dose of Jalap and Senna, and afterwards a cough mixture, he feels much better this morning and free from pain in the chest, the cough less troublesome and has only expectorated a small quantity of mucus slightly tinged with blood, during the night.—App. Hirud. No. xxx. part affect. Fotus Calid. R. Haust Jalap. c. ℥ij. Statim.—R. Mist. Antituss. ℥iss Acet. Colch. ℥ss. ter quater die.

4th.—Says he feels almost quite well again, had very little cough and expectorated only about half an ounce, which is apparently only mucus with a slight tinge of blood, pulse less frequent and soft.—R. Mist. Purg. ℥iv, Statim. Cont.

5th.—Continues to improve, the cough is trifling, and has expectorated very little and it is scarcely tinged with blood, pulse soft, skin cool and moist, tongue clean.—Cont.

6th.—The expectoration is of a more bright red colour this morning, but not more copious, says he is quite free from pain, percussion gives a dull sound to the right of the Sternum anterior to the nipple, pulse full and stronger, tongue pretty clean, bowels open.—App. Hirud. No. xij. Stern. part affect—Cont. Mist. R. Mist. Purg. ℥iv. Statim.

7th.—Very little expectoration last night, but what there was is tinged with blood, cough trifling, pulse soft, medicine operated well.—Cont.

8th.—Continues to expectorate a little mucus tinged with blood, the cough was very trifling, pulse natural, tongue clean.—App. Emp. Lyttæ Stern. Cont. Med.

9th.—Improving, blister rose well, pain relieved.—Dressing &c. Applic.

10th.—Continues to expectorate a little thick mucus tinged with blood, pulse quite soft, skin moist.—Inhal. Solut. Iodinæ bis die.

11th.—No expectoration last night and says he feels quite well.—Cont.

12th.—Discharged.

September 26, 1834.—Re-admitted this morning apparently labouring under a severe affection of the brain. He is now in a state of stupor and had been found in the night by his comrades wandering round the barracks, and when questioned was not able to give any account of his feelings. On admission his pulse was very full, quick, and bounding, face flushed, skin hot and dry, and of a yellow tinge, could not answer questions put to him, his eyes were nearly closed and looked heavy : he was bled to approaching syncope, but lost twenty ounces only ; he afterwards had thirty leeches to the temples, and took the following medicine which did not operate, and he took in the evening a dose of Ol. Ricini. with Ol. Tiglii. which operated four times freely.—Venesectio ad ℥xx. App. Hirud. No. xxx. Temp.—Hyd. Submur. gr. x. Ant. Tart. gr. i. ft. Pil. stat. R. Haust Jalap. c. ℥ij. 4 hours after—Vesp. Ol. Ricini. ℥j. Ol. Croton. gtt. ij. R. Hyd. Submur. gr. iij. Ant. Tart. gr. ss. ft. Pil. ter die.—App. Lotio refriger. Capt. Mist. Febrif. ℥ij, tertia quaq. hora.

27th.—Is now somewhat better, and remains quiet, but is unable to speak distinctly, the pulse is quick and full, but soft, skin moist, the eyes are clearer and the conjunctiva little injected, slept very little, pupils contracted, and the skin sallow and husky.—App. Emp. Lyttœ. nuchæ Rep. Ol. Ricini. ℥j. c. Ol. croton. gtt j. Statim. Cont. Pil. Cal. c. Ant. Tart. et. Mist. Febrif. Cont. Lotio. refrig. Capt.—App. Sinap. crur. et ped.

Vespere.—Continues much the same, the pulse is less frequent and soft, the oil has operated freely four times, motions oleaginous and dark coloured, approaching to green and chopped.—Cont. Pil. et. Mist. et. Lotio.

28th.—His attendant says that he has slept well most part of the night, but still does not speak, only nodding his head when questioned ; he has had one motion in the night, fæculent, but rather slimy and greenish ; his pulse is only 88 and quite soft, skin moist, tongue a little furred in the centre, eyes pretty clear, but the pupils still contracted.—R. Haust. Jalap. c. ℥ij Statim—Cont. Pil. c. Cal. et. Ant. Tart. gr. ss. ter die.—Rept. Mist. febrif. et. App. Emp. Lyttæ Mag. Capt.

Vespere.—Much the same as in the morning, and is not able to articulate, takes his medicine when given to him, but appears to have a difficulty in deglutition, bowels open, motions rather green and tenacious.—R. Ext. Colocynth. c. gr. x. Hyd. Submur. gr. v. ft. Pil. h. s.—Mist. Febrif. et. Lotio. Cont.

29th.—Has been restless during the night, and his attendant thinks he did not sleep at all, has had several motions involuntarily during the night, very green but fœculent ; his gums appear a little swelled, and the difficulty in swallowing, which he has had since first he came in has increased, the pulse is 90 full and strong, tongue furred in the centre, eyes clear and pupils contracted.—App. Hirud. No. xx. Temp.—R. Ol. Ricini. ℥j. c. Ol. Croton. gtt. i. Stat. Omit. Pil.—Cont. Mist. Febrif. c. Ant. Tart. gr. ss. tertia. quaq. hora.—Cont. Lotio refrig. Capt. et. Cataplasma Sinap. ped. et crur.

Vespere.—Has been very unwell throughout the day, quite unable to swallow, and was slightly convulsed two or three times, the eyes are closed and pupils much contracted, pulse full and soft, and not more than 70, has had only two scanty motions of a dark green colour, and very tenacious, there is no heat or tension in any part of the abdomen. Head very little hotter than natural, breathing hurried and laborious. and occasionally stertorous.—Adm. Enema. Purg. c. Spirit. Terebinth. ℥j. Statim. App. Cataplas. Sinap. ped. et. Crur. R. Mist. Camph. Aq. Menth. pip. aa. ℥ss. Ammon. Carb. gr. vi. Ether Sulph. ℥j m. ft. Haust tertia quaq. hora.—1 measure of Port Wine with Sago if he can swallow.

30th.—Has been very restless during the night and several times severely convulsed, the left leg and arm being forcibly drawn up and features much distorted, the purging injection did not operate, eyes closed and pupils still much contracted, pulse very quick 130 and sharp, skin hot and moist, has occasionally a short husky cough, left hand now contracted and fingers forcibly bent into the palm, was not able to swallow any of his medicine or any kind of nourishment during the night.—R. Ol. Tiglii. gtts. ij. to be rubbed up with a little honey and put into the mouth and repeat it in two hours if the bowels are not moved—App. Emp. Lyttæ to the whole of the vertebræ of the neck and dorsal vertebræ—Adm. enema purg. at 8 A. M. Cont. Haust. Antispas.

Vespere half past 6.—The patient became much worse soon after I left the hospital this morning, his left side was severely convulsed, the arm and thigh being forcibly bent, features more particularly

of the left side were much distorted, and eyes forcibly shut, loud stertorous breathing comes on accasionally, he appears very restless and had three or four involuntary motions of a dark green colour and tenacious, during the day. App. Sinap. again to the feet and legs. A little Ether with Mist. Camph. et Aq. Menth. to be frequently put into the mouth. to have a little thin Sago.

October 1st.—Died half past 8 P. M.

SECTIO CADAVERIS 11 HOURS AFTER DEATH.

On removing the skull (which was found very thick, ponderous, and strongly adherent to the Dura Mater) in the usual manner, the Dura Mater was seen covered with numerous spots of blood generally of a dusky red tinge, except over the anterior lobes of the brain where it was of a dark yellow or green colour and soft. On attempting to reflect it, a quantity of thick greenish pus escaped from the fore-part of the anterior lobe of the left hemisphere, and on reflecting the membrane, a large abscess was found occupying the whole of the anterior lobe and surrounded posteriorly with a quantity of dark grumous blood. Both the Tunica Arachnoides and Pia Mater were quite absorbed over the seat of the abscess, and the membranes were extremely soft and easily torn over the rest of the left hemisphere; and very vascular over the right hemisphere, more particularly over the anterior lobe. On slicing the left hemisphere the abscess was found to extend down to the Corpus Callosum, and had passed through it into the left ventricle, where particles of pus were floating in the serum, the anterior lobe and a large portion of the posterior, were extremely soft, pulpy, and of yellowish leaden hue without the slightest appearance of the cortical substance. The Pia Mater adhered firmly to the right hemisphere, particularly over the anterior lobe where the brain was very red, and on slicing, it was found very firm and red, but few bloody points appeared after the incisions were made; there was some serum effused between the tunics at the vertex which gave the arachnoid a milky appearance, the whole of the hemisphere was firmer and more vascular than normal, and there was more than the usual quantity of serum (which was muddy) in the right ventricle, the cerebellum was more vascular than normal, and there was about an ounce of bloody serum at the base of the brain.

Chest. The lungs were both congested, but particularly the right one, which appeared of a dark red colour and more dense to the feel than natural, it adhered firmly by the apex to the diaphragm, and on separating it a small quantity of pus escaped which led me to suppose that there was Abscess of the Liver communicating through the diaphragm with the lung, but on inspecting the diaphragm further, it was found entire, and on slicing the lung a small abscess on the centre and near the convex surface of the lung which communicated with the bronchia, and which accounts for the expectoration of bloody pus in his former illness, and I have since learnt from his comrades that after leaving the hospital he occasionally spit up pus mixed with blood, and that he had been complaining of acute pain across the forehead for three or four days before he was last brought to hospital. The heart was large and flabby, the convex surface of the pericardium was more vascular than natural, and contained more than the usual quantity of serum, the left lung was healthy with the exception of the congestion.

Abdomen.—The liver was not at all enlarged, and, with the exception of its adhering very firmly to the diaphragm at the superior and convex surface, appeared quite healthy. The gall bladder was distended with a dark greenish and curdy bile. The spleen was somewhat enlarged and hepatized. The stomach and intestines were healthy, the latter were of greenish hue externally, being lined with dark green tenacious fæces, and the mucous coat of the small intestines was more vascular than natural.

OCTAVUS WRAY,
Surgeon, European Regiment.

CASES OF DISEASED MESENTERIC GLANDS, &c.

The two following cases are somewhat similar in the train of symptoms and in the results of examination after death. The symptoms common to both were an almost daily accession of fever, or at any rate of increase of pulse, sometimes ushered in with violent shivering; the absence of pain on pressing the abdomen; extreme debility; and gradual wasting of the flesh. I did not anticipate finding Mesenteric disease, after death. In the first case Dysentery was supposed to be the influential disease, but the bowels did not exhibit signs of violent disease after death. In the second case the affection of the heart was not the main disease, but part and parcel of a most formidable mass of morbid structure, and yet in either case how few the diagnostic signs!

1st Case.—K. B. a prisoner, age 30, was admitted into Hospital, July 23d. 1833, with dysentery which lasted more or less until December. During this period he recovered from the dysentery, and it relapsed

several times, a little slimy matter was almost always to be seen in his evacuations. In December he became much more feeble, anasarcous swellings appeared generally over the body, the pulse in the morning was very feeble, fever came on in the afternoon with slight shivering and went off at night with gentle perspiration, the tongue moist and pallid, the evacuations of a pale colour. Bark was given in the absence of the fever, combined with chalk mixture when slime appeared in the stools; castor oil occasionally; antimony during the attacks of fever, and a mild diuretic.

January. During this month the fever diminished, but there was increase of pulse daily in the afternoon, lasting for several hours. *January 25th.* Fever returned ushered in with severe shivering and closing with perspiration—no slime in stools.

February. The debility now became extreme; carbonate of ammonia and wine were added to the bark given, the dysenteric affection came on again and was relieved, and during the latter half of the month he remained free from fever or increase of pulse in the afternoon, his evacuations feculent.

March. For the first half of the month he remained much the same—on the 19th he again passed slimy stools and the pulse quickened towards evening. The debility increased, he gradually sunk, and died on the 25th. The mouth had been affected for the relief of the dysentery; and blue pill, calomel and colocynth had been occasionally given, to improve the secretions, in the course of the disease.

Post Mortem examination. Head. About an ounce of fluid in the bag of the arachnoid—the vessels on the surface of the brain rather vascular.

Chest. The lungs were studded with recent tubercles—in the left bag of the Pleura one pint of fluid, in the right four ounces. The heart smaller than usual by one third.

Abdomen. The whole surface of the Peritoneum lining the abdomen, and the mesentery, studded with minute seed like depositions of lymph. The external surface of the liver covered with the same—the blood vessels of the mesentery distended with blood and of a purple colour. The glands of the mesentery very much enlarged, some as large as unbroken almonds, upon dividing them the substance of the glands was found vascular, and in their centre a quantity of pus—the fatty appendages of the large intestines thickened and increased in size, and containing pus within their structure. There were several smooth apparently healed ulcers, and one fresh ulcer, on the mucous membrane of the large intestines.

2d Case.—G. S. prisoner, age 35, was admitted into Hospital, April 27, 1834. He was feeble, with a small quick pulse, rather hot, dry skin, and furred tongue, bowels in good order, a dull heavy expression of countenance and sallow complexion, he had no cough, no uneasiness on pressing the abdomen. The symptoms remained thus. *May 22d.* Upon applying the ear over the heart greatly increased sound was heard beneath the sternum, and on the right side of the organ extending to beneath the right clavicle, and over the back. I considered that the disease was, enlarged right side of the heart. From about this time he had a daily attack of fever, coming on with slight shivering, sometimes in the morning, or in the afternoon, or at night and subsiding after a few hours with perspiration, during the intervals of the fever he expressed himself to be easy, his pulse which was at first small, quick and regular, latterly became feeble, he could lie in any position without distress, breathing easily, no pain in chest nor in abdomen, the respiration was heard distinctly by the ear applied to the chest, the evacuations healthy; the tongue, at first moist with a central white fur, latterly became red and dry, the skin dry. The symptoms continued, with scarcely a change, to the day of his death, there was the daily attack of fever; increasing debility, and gradual wasting of the body, with anasarcous swellings of the legs towards the close of the scene. On the 10th of July the surface became chilled, he lay during the day in an unconscious state, and died that evening. The morbidly increased sound of the heart continued violent to the last, the bowels were a little disordered for a day or two previous to death. He was treated at first with tartar emetic, salines and purgatives; subsequently for the supposed disease of heart, leeches were applied to the chest, bark and camphor, and ammonia and T: Valerian. Am. were given, and T. Digitalis and Vin. Antim. during the fever; latterly 5 grs. of Plummer's Pill every night.

Post Mortem examination, ten hours after death. Head. Minute ramifications of vessels on the surface of the brain highly injected, about 2 oz. of fluid altogether within the arachnoid and ventricles. The veins of the choroid plexus congested—the brain at its base, particularly that part beneath the lateral ventricles, very soft. The brain generally somewhat softened.

Chest. On left side partial adhesion between the two Pleuræ, 3 or 4 oz. of fluid on this side, the lungs of both sides here and there tuberculated, the apex of the right lung somewhat consolidated—both lungs posteriorly gorged with blood, of a dark purple colour, and emitting frothy mucus when cut. The Bronchiæ and trachea filled with frothy mucus. In Pericardium 1½ oz. of fluid. Heart very small, right

ventricle of half the common size, and two or three lines only thick. The pulmonary gland being under the aorta, right pulmonary artery, and ascending vena cava united into a mass, firm and cheese-like when cut.

Abdomen. The walls of the abdomen, the omentum, intestines, liver and spleen agglutinated together. The whole surface of the peritoneum, throughout the several viscera, the mesentery, &c. covered with small granules of lymph giving it a nutmeg grater appearance, its surface of a deep red color, purple congested veins ramifying over it, these granules between the layers of the mesentery of a larger size—the glands within the mesentery and those lying on the loins enormously enlarged forming a large mass filled with dark coloured and white creamy matter. The veins of the mesentery and those encircling the intestines, purple and congested. There were several large bladders (hydatids I suppose) with thin transparent walls and containing a yellowish fluid lying amongst, and attached to, the agglutinated intestines and viscera, these could be separated from their attachments and taken out entire. Liver covered externally with a layer of lymph which was left attached to it after tearing off the peritoneum, its surface in places of a dark colour and softened in texture, the gall bladder empty, its walls thickened, the cystic duct diminished in calibre, the glands about the hepatic duct enlarged. Spleen studded externally and internally with tubercles of lymph.

Intestines.—An ulcer at the termination of mucous membrane of Ileum, and another large one at the commencement of the Cœcum, the mucous surface of descending colon in patches red and uneven, a few minute ulcers scattered here and there.

Dec. 22, 1834. W. A. GREEN.

FIVE CASES OF BLINDNESS, TWO FROM INFANCY AND THREE FROM EARLY CHILDHOOD, RESTORED TO SIGHT BY OPERATIONS.

——— "Oh worse than chains
"Dungeon or beggary, or decrepid age!
"*Light* the prime work of God to me is extinct,
"And all her various objects of delight
"Annull'd.
——— "From the cheerful ways of men
"Cut off, and for the book of knowledge fair,
"Presented with an universal blank
"Of nature's works, to me expung'd and raz'd,
"And wisdom at *one entrance* quite shut out."

Case of Congenital Cataract.—Shadie, Brahmin caste, residing at the village of Luolpoor, near the K,hérie pass, aged 16 years, has no recollection of ever having seen; his relations became aware of his blindness when he was six months old. Has some difficulty of hearing. Always enjoyed good health, excepting a purulent discharge from the ears, and has also suffered from ophthalmia. In the hot weather especially suffers much from the glare of light, producing lachrymation and redness of the conjunctiva.

Present appearance of the eyes. Has no power of volition over the balls of the eyes, the muscles rolling them about with great irregularity and spasm. Appendages all healthy and well developed. Some preternatural vascularity of sclerotic arteries, he distinguishes light from darkness, and the shadows of objects passing before him. Cornea clear, Iris dark and healthy, and expanding and contracting correctly—a good anterior chamber, has a bright pearly appearance, being capsular, with little or none of the lens remaining, affording every appearance of toughness like parchment. The eye keeps very steady when sitting unnoticed and undisturbed.

On the 27th November after some days of preparatory treatment, which it would be needless to describe, Shadie underwent the operation on the right eye, in the presence of Dr. Robinson at Landhour. A delicate and slightly curved needle with cutting edges was introduced about a line and a quarter from the cornea, a little below the transverse diameter, no impression appeared to be affected on the cataract. But on reclining, it descended to the bottom of the vitreous humour, leaving the pupil perfectly clear. The needle was therefore withdrawn without allowing it to be raised again, and a pledget dipped in cold lotion applied. He expressed himself as highly delighted; the light and objects appearing brilliant. The operator and his dress as very pretty (Buhoot Khoobsoorut) and every thing, in fact, which came within the sphere of his vision, seemed to produce a highly gratifying impression: and as I was sitting in front of him, my coat, which was scarlet, attracted his attention, producing involuntary laughter or smiling—but of course these observations were but momentary as the bandage was applied without delay. He complained of the flashing of light, but otherwise he experienced no inconvenience or pain, and said he felt very happy. The after treatment for anticipating inflammation need not be described.

On the 29th being pressed for time, and not the slightest inflammation having occurred the operation was performed on the left eye. The cataract had risen in the right eye so as to appear behind the inferior half of the pupil, dancing behind it whenever he moved his eye, but it was sufficiently distant to avoid doing injury to the

Iris, and it was thought advisable to allow it to remain, intending at a future period to make a further attempt to divide it, and push the fragments into the anterior chamber. The needle was therefore introduced in the same manner in the left eye, and carried to the front of the cataract, which was equally tough and resisting to the cutting edge of the needle. I succeeded however in penetrating it with the point of the needle, and exposing its substance to the action of the aqueous humour, and, avoiding too much freedom with the eye, the needle was withdrawn, and the cataract left to undergo absorption.

Nothing further was done until the 3d December when, on examination, the right appeared in the same condition, the cataract remaining unaltered. His friends were extremely impatient to return to their homes, for seeing so many other cases of ordinary cataract restored to sight immediately they began to think the case hopeless. Reflecting on the case I thought of the following expedient, which I do not remember to have heard or read of; and I hope will be attended with invariable success in all cases of long standing congenital cataract. The patient being seated before me as for extraction of the cataract, an incision was made with a sharp pointed lancet, about a line from the union of the sclerotica, with the cornea, to the extent of full one line and a half, midway between the external canthus and the inferior portion. The pupil being well dilated by the Belladonna, and, introducing a delicate and sharp pointed hook, the cataract was seized and withdrawn immediately, leaving the pupil perfectly clear. A few drops of vitreous humour escaped and nothing but a slight vascularity at the incision was the consequence.

A second operation was performed in the left, in which it was more completely divided, and absorption seemed to be slowly progressing, having succeeded in bringing a small nucleus forwards into the anterior chamber, which was absorbed in about eight days. The boy accompanied me in a litter to Meerut, and remained with me until the 22d December, when the report was as follows. Vision restored. Right eye perfectly healthy—pupil clear—iris contracting and expanding—no inflammation. Left eye—slight vascularity, but no pain—absorption going on, but a small portion remaining and further interference was deemed unnecessary, especially as I was ordered to proceed from Meerut to Cawnpore with convalescents, and he was already a great distance from home.

During the development of the blessing of sight, which has justly been named "the sovereign of all the senses;" the boy was of course often examined as to his increasing acquaintance with objects.

The bandages were removed every evening at sunset; and his attention was directed to men, the tents, the sky, the trees, and their foliage, animals of different kinds; the colours, and figures, and motions of all which he was in time able to describe, but much confused at first. There was no correspondence between the sight and touch, neither did he for several days direct his eyes straight to objects so as to examine them minutely, at night he noticed the stars, and the flame of a candle and the features of my face. He had been much reduced by such repetitions of operations and occasional purgatives—a slight mercurial course, and a few leeches (though no other depletion was requisite;) but, as he gained strength by better diet, his vision greatly improved. He was watched to take up various objects and notice them—latterly I was in the habit of calling him into my tent when at breakfast, he noticed the cups and saucers and their patterns—chintz on the canvas—and he observed attentively a hookka describing the bell (cutglass) as bright—noticed the smoke and mouthpiece (silver) and saw distinctly the smoke ascending.

On the 20th December he walked several yards without assistance. A lady gave him a coloured chintz cap, with which he was much pleased, and he distinguished on it the colours of green and red and the white ground—as his new sense could scarcely be said to have been exercised more than fourteen days—further observations could not be made as to his judgment of distances, position, forms and motions; but these will be ascertained by a friend hereafter.

CATARACT FROM THE AGE OF FIVE YEARS.

Goomanie, brother of Shadie, Æt. 25, healthy habit, has experienced slight pains and redness in the eyes during the glare of the hot weather, blind from the age of five years old. Can distinguish light from darkness, and the shadows of objects, and colours when brought close to his eyes—state of Lens and Capsule very similar to his brother's. Both reside at Luolpoor, near K,hérie pass. He has the power of steadying the ball of the eye better than Shadie.

The usual operations for rupturing the cataract and submitting them to the action of the aqueous humour, was performed at intervals of several days. The operation was successful in the left, but the right became amaurotic after a rather severe attack of inflammation occasioned by his having been allowed, contrary to my injunctions, to walk up the hill from the Rajpoor to

Landhour, and although the inflammation was speedily subdued by active measures the eye remained amaurotic. His vision however with the left, is sufficient for every useful purpose. The case is interesting as illustrative of the optic nerve, after twenty years of blindness, remaining capable of receiving the impressions of external objects—and from the circumstance of cataract occurring at the unusual age of five years. His judgment of colours, size, distances, figures, positions and motions was more rapid, and was very good, when he left me; the two brothers were anxious to return home, and cultivate their knowledge with the external world, in the beautiful scenery of K,hérie pass.

CASE OF BLINDNESS FROM THE AGE OF THREE WEEKS IN A BOY RESTORED TO SIGHT BY THE OPERATION FOR THE FORMATION OF AN ARTIFICIAL PUPIL.

Ull-ooddeen son of Kuluvider Bux, aged twelve years, an intelligent boy, lost his sight in consequence of neglected inflammation and ulceration of cornea of both eyes, at the age of three weeks, leaving two dense opacities of the cornea. There was a small transparent semi-lunar portion of the cornea opposite the external canthus of the left eye, where the iris was observed behind of a healthy appearance—rolls the eye ball about in a spasmodic manner, retina sensible to the glare of light and the shadows of objects passing close before him, but further than this, the child was completely blind, he could not distinguish colours, and was led about by his family perfectly helpless. He resides at K,hérie. A small sharp knife was introduced about a line from the cornea (coratomia) and an opening made in the iris, immediately after which he was much delighted and surprised at the objects appearing before him, and after a few moments' examination of him, during which he exhibited the phenomena of Shadie, the light producing a powerful effect, the bandages were immediately applied. On the fourth day the bandages were removed, and he was permitted to examine various objects presented to him—colours, a hand, a cap, the ring on the finger, a penknife, all of which he observed, and appeared highly amused and delighted with his new condition, exclaiming "I am very happy." There was the same want of correspondence with the touch, he noticed attentively my face, smiling. He sees of course obliquely. He was much gratified by looking at the sky, trees, fields. The stars at night and the beautiful appearance of the horizon after sunset and before sunrise when

"Morn, her rosy steps in the eastern clime
"Advancing, sows the earth with orient pearl."

His parent refusing to accompany the camp further, I was prevented from making many interesting observations on this child, as his knowledge of the visible world increases; but, of course, he knew not the names of anything until he was told, or permitted to touch, as he quitted me on the 6th day—it is gratifying however to know that Ull-ooddeen (or Alladin, as his name would be in the "Arabian Nights") has obtained that "lamp" which will light him to the fair aspect of this visible world, and that he can now no longer say to *light*, with the incurable Milton,—

——— "But thou
Revisit'st not these eyes, that roll in vain
To find thy piercing ray, and find no dawn."

CASE OF A BOY BLIND FROM THE AGE OF FIVE YEARS FROM SMALL POX, RESTORED TO SIGHT BY EXCISION OF A PORTION OF THE IRIS (CORECTOMIA).

P,hool Sing brahmin, son of Dilla Sing, aged eleven years, dense opacity of the cornea, from the small pox, six years since, leaving the circumference of the cornea of left eye clear for the space of half a line, and to the extent of two lines at the external inferior portion. Left eye sunken in. He could see objects and colours, when brought near his temple by distorting the eye towards the nose, being able to count the fingers of a hand.

An incision was made in the external and interior portion of the cornea close to its union with the sclerotica, the iris protruded by pressure, seized, and cut off with a pair of curved scissors. (Corectomia). No hemorrhage, and not much pain, pupil formed of a very fair and natural extent, and ovoid, the boy saw admirably well.

CASE OF CATARACT AT THE AGE OF FOUR YEARS IN A GIRL, RESTORED TO SIGHT BY THE OPERATION OF RECLINATION.

Luchmie, Hindoo girl, residing at Khujoorwala near Suharunpoor, aged eleven years. Blindness commenced at the age of four years. Cataract capsulo-lenticular, the capsule having a starry appearance, and shining white like mother o' pearl. Could distinguish light from darkness, and the shadows of objects. The operation was performed on both eyes and the girl saw immediately.

In concluding this imperfect account I would observe that the opportunities afforded on a line of march were insufficient to enable me to give a more complete one. They were dependant on my private support most of the time, and some of them are much indebted to Dr. Robertson at Landhour for the comforts provided for them during several days' stay there. A

comfortable conveyance was supplied, and every care taken of them whilst with me.

The operation for extraction of the congenital cataract through the sclerotica appears to me very practicable. The cure is instantaneous, and unattended with difficulty, and little or no injury is inflicted on the eye—at all events much less than what must result from repeated introductions and movements of the needle for cutting up, or tearing the cataract, and I trust that Surgeons will give it a fair trial. Of course it is only applicable where the capsule is thickened, and unyielding, as in all advanced cases of the disease.

The circumstance of cataract occurring at the ages of four and five years, in the above cases, is not perhaps unworthy of notice.

The cases are not without interest, in showing how much good we can confer on our fellow-creatures, by giving intimation in the places through which we pass, taking every precaution to avoid doing too much, and giving written directions in the Persian and Hindee characters for the after treatment. In the space of little more than one month 49 cases of operative surgery in the accompanying abstract, may be considered as the minimum of what may be effected monthly, were a medical man to make a tour of India, or by a Hospital ambulante, as the places through which I passed were by no means very populous. The *result* in the abstract was faithfully noted down on returning by the same route, and most of them were observed by the following gentlemen. Captain Hogarth, Cameronians. Drs. Drever of Sirdhana, and Thompson at Suharunpoor. The Magistrate of Moozuffurnuggar. Lieutenant Meik, H. M. 16th Lancers, and others.

It is not the least gratifying that the five patients whose cases are related above may each now individually say,

——— "To me returns
"Day, and the sweet approach of even, and morn,
"And sight of vernal bloom, and summer's rose,
"And flocks, and herds, and human face Divine!"

Note.—With reference to the above interesting cases, the following remarks of Mr. Guthrie on the sensibility of the eye, may not perhaps be unacceptable to our professional as well as unprofessional readers.—

"The eye being opened and the eyelids retained asunder, the organ loses all the extreme sensibility with which it is endowed for its security and preservation in its ordinary state. Public opinion, which, on medical subjects, is generally erroneous, although for the most part founded on professional authority, is in no instance more injurious than in relation to the eye. It pronounces it to be an organ of a very delicate nature, exquisitely sensible, requiring the greatest delicacy of touch, and the utmost nicety of management; which opinion some oculists formerly found it convenient to support, and which the public may still believe without any great disadvantage; but students in surgery must be taught otherwise. They must learn that the eye is not a delicate organ, that it will suffer more comparative violence with less injury than any other of importance in the whole body; that, so far from being exquisitely sensible, it is, when exposed in a healthy state, nearly the reverse, only becoming permanently so on the occurrence of inflammation; and that the ablest and most successful operators are not apparently, although they are in reality, the most tender in their proceedings. The opinion of the exquisite sensibility of the eye has arisen from the pain which is felt on the admission of a small piece of dirt or a fly between the eyelids; but this occurs from a wise and preservative provision of nature on account of the insensibility of the eyeball itself. Let the eyelid be raised, and the same piece of dirt applied to the surface of the eye, no pain, and scarcely a sensation will be produced: remove the piece of dirt, turn out the lid, and whilst it is retained everted, place the piece of dirt upon it, no greater sensation will be induced than is felt when it is applied to the eyeball. The inference is that both surfaces, when touched separately are nearly insensible to this species of irritation. But let the same piece of dirt be put between the eyelid and the eyeball, and the sensation produced is exquisitely painful. To give rise to this sensation it is necessary that the two surfaces should come in contact, and that the foreign body be grasped between them. If this were not the case, an irreparable injury would often occur to the transparent part of the eye, before it would be observed; and if the raising of the lid and the separation of the surfaces did not nearly annul sensation an operation could not be performed for cataract; for who could bear quietly the sensation which must arise from pushing a needle into the eye, if it were analogous to that arising from a fly or a dry solid substance between the eye and the lids? The experiment may be tried in a very simple and conclusive manner by any one on himself, by merely keeping the lids apart by an effort of the will, when the end of the finger may be placed boldly on the eyeball without any inconvenience. Inflammation, by enlarging the vessels, gives rise to pain in the same way, and the sensation is at first as if some extraneous matter were interposed between the lids."—*Editors.*

Number	Dates 1834.	Names and Caste.	Residence.	Age.	Constitution	State of Disease.	Duration.	Nature of operation	Remarks.
1	Nov. 13th,	Muhmosa Brahminie	Dhuotala.	65	Good.	Lenticular Cataract.	8 ys.	Reclination.	Successful.
2	,, ,,	Joolhaeer	,,	40	Feeble	Do. Do. Do.	5 ys.	Reclination	Successful
3	,, ,,	Bukshoo Mehter	,,	60	Feeble	Do. Do. Do.	5 ys.	Do.	Do.
4	,, ,,	Bunnea	,,	70	Feeble	Do. Do. Do.	8 ys.	Do.	Unsuccessful from low Inflammation
5	,, ,,	Bhurbhoogie	,,	50	Feeble	Do. Do. Do.	8 ys.	Do.	Successful
6	,, ,,	A Bearer	Sirdhanna		Dissipated	Softish Cataract.		Depression	Unsuccessful. Dr. Drever assisted
7	,, 14th	A Moosulmaun	Sirdhanna	40	Good	Ptyrigium	3 ys.	Removal	Successful. Do. Do.
8	,, ,,	A Brahmin	Khutuolie	50	Feeble	Hard Lenticular Cataract	7 ys.	Reclination	
9	,, ,,	Nizamut Paethan	Do.	45	Good	Do. Do.		Do.	Successful. Dr. Drever assisted
10	,, ,,	Dissoundie Jolahâ	Sirdhanna	60	Good	Do. Do.	4 ys.	Do.	Suceessful. Do. ,, ,,
11	,, ,,	Emaum Bux Dhoonia	,,	50	Debauched and feeble	Do. Do.	3 ys.	Do.	Successful. Do. ,, ,,
12	,, ,,	Poorun Dhobie	,,	40	Bad	Milky Cataract	3 ys.	Rupture	Unsuccessful from low inflammation in an unhealthy habit. Do. ,, ,,
13	,, ,,	Gobinda	,,	70	Robust	Hard Cap. Lentic:	6 ys.	Reclination	Successful but some Inflammation for sometime. Do.
14	,, ,,	Khoshial Sing Hindoo	,;	50	Good	Do. Do.	1 ys.	Do.	Successful. Do. ,, ,,
15	,, ,,	A Soobadar Moosulmaun	,,	40	Good	Do. Do.	3 ys.	Do.	Successful. Do. ,, ,,
16	,, ,,	Kurrum Khan Mosulman	,,	50	Good	Do. Do.	5 ys.	Do.	Successful. Do. ,, ,,
17	,, 15th,	Heera Bunnea	Moozuffurnuggur	8	Weakened	Stone of the Bladder	3 ys.	Extraction by the operation of Lithotomy	Successful, wound healed within the month, returned home free of complaint.
18	,, 16	Elahee Bux Moosulmaun Rajpoot	Moozuffurnuggur	8	Good	Stone of the Bladder	7 ys.	Lithotomy	Successful, wound healed up on the 26th day and returned to his home free from complaint.
19	,, 16	Goollooa Mehtre	Moozuffurnuggur	14	Good	Stone of the Bladder	10 ys.	Do.	Successful, wound healed about the same time, and returned home in good health.
20	,, 16	Jhundoo Durzie	Moozuffurnuggur	7	Reduced	Stone of the Bladder	1½ ys.	Do.	Successful, wound healed rapidly, and he returned to his home on the 28th day.
21	,, 17	A Hindoo	Deobun		Good	Hard Capsulo-lenticular cataract	Blind for some years	Reclination	Successful, saw immediately when the lens was depressed. And is now pursuing his usual avocations.
22	,, ,,	A Ditto.	Deobun		Good	Do. Do. Do.		Do.	Restored to sight; no Inflammation; now persues his usual avocations.
23	,, ,,	A Moosulmaun	Deobun		Robust	Do. Do. Do.		Do.	Violent inflammation of right Eye. Unsuccessful; but afterwards redepressed, and there is a fair chance of his seeing with both eyes, the left having since been depressed.

24	„	19	A Brahmin	Suharunpoor	70	Good	Do. Do. Do.	All blind for some years	Do.	Do.	Restored to sight.
25	„	20	A Moosulmaun	Do.	30	Good	Soft Cataract		Do.	Rupture	Absorption, and restoration to sight
26	„	„	A Hindoo	Huruora			Hard Lenticular		Do.	Depression	Successful.
27	„	20	A Moosulmaun	Do.	55	Robust	Hard Lenticular Cataract			Depression	Inflammation, but not so far as to effect the sight materially.
28	„	21	A Hindoo	Do.		Good	Do. Do. Do.			Reclination	Successful.
29	„	23	A Moosulmaun	Munno Majera	50	Feeble	Do. Do. Do.			Reclination	Unsuccessful from inflammation.
30	„	„	A Hindoo	Do.	50	Do.	Do. Do. Do.			Do.	Successful.
31	„	„	A Hindoo	Do.	40	Do.	Do- Do. Do.			Do.	Doubtful, he not having appeared again.
32	„	25	Sadie Brahmin	Near K,herie Pass Chuolie Village	16	Good but feeble	Blind from infancy Congenital Cap : Cataract the Lens being absorbed	had never seen			Successful the case will be detailed separately. Dr. Robertson assisted.
33	„	„	Goomanie brother of Sadie	Chuolie	25	Good	Capsular Cataract with a small mulcus of Lens	blind from the age of 5 ys.			Successful the case will be detailed separately " Do. Do.
34	Dec.	7	Megoo Sudh	K,herie village of Luolpoor	70	Infirm	Hard Lenticular	10 months		Extraction	Inflammation moderate, but result unknown as he went home.
35	„	„	Ulloodeen	Kherie	12	Good	Opacity of cornea of both eyes from the age of 20 days producing total blindness	20 days		Operation for the formation of Artificial Pupil (Coratomia)	Successful and the boy soon saw admirably—a very interesting case which is separately detailed.
36	„	18	Hurdoo Mehtercaste	Huruora	60	Good	Hard Lenticular cataract	8 mos. percvd.		Reclination	Saw immediately.
37	„	„	A Female	Do.	38	Feeble	Soft Cataract	1 yr.		Rupture	Result unknown.
38	„	10	A Hindoo	Suharunpoor	26	Good	Milky	1 yr.		Rupture	
39	„	„	A Female Hindoo	Do.	50	Good	Hard Capsulo-Lenticular	1 yr.		Reclination	Saw immediately. Asst. Surgeon Thompson assisted.
40	„	11	Luchmee Hindoo Girl	Khujoor-wata	11	Good	Capsulo-Lenticular	7 ys.		Reclination	This Girl was couched in both Eyes, and saw admirably with both.
41	„	„	Naraeen Jath	Do.	60	Stout man	Closed pupil	7 ys.		Operation for Artificial pupil	Saw immediately
42	„	„	Booddhoo Dhonook	Do.	55	Feeble	Hard Capsulo-Lenticular Catt.	3 ys.		Reclination of sight	Saw immediately
43	„	„	Gean Doss Baeragee	Do.	65	Good	Do- Do.			Reclination of both Eyes	Saw immediately
44	„	„	Kulunderie Moosulmaun	Do.	30	Good	Right eye lost left contains a small hard and tough nucleus	6 ys.		Compound operation	Saw immediately ; but severe inflammation came on, result not known.
45	„	13	Summoo Jolahâ	Deobun	24	Feeble	Very soft Catt.	2 ys.		Rupture	Not since seen.
46	„	15	Jankee Rajpoot	Khuteolie	65	Infirm	Milky Cataract	2 ys.		Do.	
47	Dec.	9	A Chumarr	Suharunpoor	26	Robust	Stone of Bladder	10 ys.		Lithotomy	Under Treatment by Asst. Surgeon F. Thompson at Suharunpoor.
48	„	10	A Moosulmaun child	Do.	9	Good	Stone of Bladder	1 ys.		Lithotomy	Under Treatment by Asst. Surgeon F. Thompson at Suharunpoor who assisted.
49	„	16	Nucchul Rajpoot	Sirdhanna	70	Good	Hard Cap. Cataract	10 ys.			With Dr. Drever at Sirdhanna who assisted.

F. H. BRETT.

DR ESDAILE, IN REPLY TO DR. CAMPBELL'S REMARKS ON THE "FORMATION OF FAT IN THE HEART."

Dear Gentlemen,—Dr. Campbell has favoured me with some observations on a case I sent you for publication, when a substance like well organised fat, was found in the heart, and neighbouring vessels. When describing this substance, I said, "where most dense, this deposit was covered with a red vascular coat, which could be peel'd off, and gave out abundance of oily globules, when squeezed, which floated on water;" I may add, that it was so elastic as to return to its original shape, after pretty severe pressure between the fingers.

From the absence of all detectable disease, and the presence of these strong signs of organization, I ventured to suggest that fibrin had been deposited, and became organised. Dr. Campbell conceives, that I have described the common Post-mortem fibrinous deposit called "Polypus of the Heart."

I have had numerous opportunities of seeing, and handling these accumulations, and the very different character of the substance, in question, induced me to send a record of it, to your pathological repository; especially as it differed so materially from the fatty matters, described by Dr. Baillie, and quoted by Dr. C. "which have no admixture of oil"—the product of my subject, giving out abundance of oil, after being washed and peel'd.

It is the correctness of the *fact*, more than the justness of my theory, that I care about, and I think Dr. Campbell scarcely entitled to impugn its accuracy, by a parallel with a case, where he says, "The circumstances attending, were very different from those of Dr. E's; and the explanation of the diseased appearances, consequently at variance with his." Under these circumstances, I still think, that I did not describe a Post-mortem formation.

Dr. Campbell will excuse my attempting to prove, that the idea of organised substances being found in the cavities of the heart during life, is not so "adverse to possibility, or common sense," as he at present holds it to be. Under the article "Pseudo-morbid appearances," in the Cyclop. of Pract. Med. the writer after remarking, that the fibrinous masses found in the heart, are not usually to be reckoned morbid productions found during life, adds, "However some of these coagula have been found organised, some containing pus, others with pieces of bone on, or in them; whence we must conclude that, these fibrinous masses may be found before death, and produce considerable disturbance of the circulation." Dr. C. by turning to No VI. of your journal, will see, that Dr. Wise, quotes Mr. Wardrop as, "having seen a preparation of a Polypus of the left ventricle, in the centre of which was a distinct abscess;" another is mentioned, as being "highly vascular."

When Dr. Campbell calls to mind, the not unfrequent conversion of the fibrinous deposits of aneurismal sacs into bone or cartilage, the formation of *Phlebolites* in veins, and the organization of coagula in arteries, and that John Hunter believed in the self-organising power (if I may use such a compound) of the blood, I think he will be disposed to admit, that he has been rather too hasty, "in pinning his faith at once, to those who deny the occurrence of these formations, in the living body."

I am, your obedient Servant,

J. ESDAILE, *M. D.*
C. A. S.

Azimgurh, 7th Feb. 1835.

LUXATION OF THE FEMUR.

To the Editors of the India Journal of Medical Science.

Gentlemen,—I do myself the pleasure of sending you a case of Luxation of the Femur into the ischiatic notch, which although not perhaps very creditable to me as a Surgeon, may prove interesting to some of your readers. Accidents of this description are so rare in this country that I think it is, in some measure, the duty of every practitioner to record such cases as fall under his care, more especially where particular symptoms or circumstances render them unusually perplexing.

October 30, 1834. The subject of this case was a tall well made bearer named Assaram, apparently about fifty years old, of temperate habits and good constitution. In the evening, he left the station of B. —— for the village of N. —— with some baggage under his care, and having mounted a loaded hackrey, soon fell asleep. About 9 P. M. the vehicle passing over a high bank, he was thrown off, alighted upon his right buttock and remained in that situation all night, during which he was exposed to some rain that fell.

October 31. He was this day conveyed in a cutoly* to——and placed under my care.

Having listened attentively to his account of the accident (which I have already detailed) I examined the limb, the state and appearance of which were as follows.

* A Cutoly is a very small kind of conveyance for sick persons, and may be procured in every village in Hindoostan.—It is like a Hospital Dooly, only not long enough to admit of the patients lying at full length, and is usually carried by two men.

The buttock was a good deal swollen, there was pain in the neighbourhood of the joint and tuber ischii, the trochanter major was felt in its usual situation, and there was no scar or bruise upon the patella or foot. The limb was in a slightly flexed state (that being the easiest posture) the power of the extensors of the leg was gone, there was no inversion of the foot, (which Sir Astley Cooper lays down as one of the symptoms of dislocation into the ischiatic notch) and I found that by pushing the thigh back upon the trunk, the pelvis was moved, which showed that no fracture existed. I was confirmed in this view of the case by the absence of any grating noise during the examination of the parts and by the patient's declaration that no fracture had occurred. The natural position of the foot and the manner in which the accident had happened, lulled to sleep any suspicion of the femur having been luxated. After the lapse of a fortnight, the patient was found to be still in a helpless state, suffering a good deal from pain and complaining particularly of tension of the gracilis muscle. He then for the first time mentioned that at the moment of the accident he had heard a snapping noise; and on placing him on his back with his lower limbs extended, the injured one was found to be about half an inch shorter than the other.

I confess I was sorely puzzled for I could not bring myself to believe that dislocation backwards could be effected, except by force applied to the knee when the limb is flexed, or to the foot when the limb is extended, and at a right angle with the trunk, yet after repeated enquiry of the patient, I found that such had not been the case. The absence of so material a symptom as inversion of the foot served to render the nature of the injury, still more perplexing—I ordered a purgative, leeches in great numbers, fomentations and poultices and gave opium at night, but without producing any decided relief.

Nov. 17. I examined him again very deliberately, and besides permanent shortening of the limb, tension of the gracilis muscle, and pain on moving the thigh; I observed that the right buttock was more prominent than the sound one and thought I could feel the head of the bone obscurely, behind the trochanter major.

The right knee, when left to itself, was always a little in advance of its fellow, and the man appeared to lean forward, in a slight degree

Nov. 19. The last examination having left no doubt on my mind that the case was one of dislocation into the ischiatic notch, and being fortunately provided with a set of pullies, I had made preparations for reduction. Three grains of Emetic Tartar were given in divided doses at short intervals, the injured limb was brought across the other so as to form an obtuse angle with the trunk, and extension gradually increased was kept up for about half an hour. The limb was then rotated at the knee, I passed a than of cloth under the thigh near the Pelvis, and over my neck, and then by lifting with some force succeeded in reducing the dislocation. The patient and the Native doctors heard the noise occasioned by the bone slipping into the Acetabulum, but I did not. The limb did not at once regain its proper length, but in the course of two days, I had the satisfaction of finding, that it was as long as the other, and that the patient felt much less pain than previous to reduction.

Dec. 16. His progress towards recovery is extremely slow. To-day for the first time I had the pleasure of seeing him walking without a stick or any other assistance, and although he can move the limb in every direction, yet he suffers a good deal when he rests his weight upon it.

I am, Gentlemen,
Your obedient Servant,
A Constant Reader.

BLEEDING IN THE COLD STAGE OF INTERMITTENT FEVER.

The novelty of this practice, and the dangerous consequences supposed to result from it, have deterred many from pursuing this mode of treatment. It is but natural that we should receive with distrust and adopt with caution, a doctrine, which seems so totally at variance with all our preconceived notions of the nature and treatment of this disease. The employment of V. S. is one of the newest lights, which has dawned on us, and is I believe a coruscation from the luminous and inventive imagination of Dr. Mackintosh of Edinburgh, assisted by an unwearied assiduity, and perseverance, in every object, connected with the profession; to this gentlemen we are indebted, for a safe and most useful prophylactic, by the judicious administration of which, this most troublesome disease is not only speedily cured, but the chronic visceral derangements, so frequently the sequelæ of its invasion, are in a great measure, if not wholly, obviated.

The practice is I believe far from being universal, in this country, and I am aware that Medical men in general, are averse to it, particularly among the natives; I confess that at first I felt some difficulty in overcoming my own prejudices, and with a wholesome dread of fatal syncope, debility, natural want of stamina, I with a trembling hand, resolved to try its effects, on an

emaciated *kidmutgar*, who was ill for six days previously. Having directed him to come to me when his cold fit was about to commence, I took from his arm six oz. of blood, when he became faint, and continued in that state for nearly half an hour; giving him every now and then a little *ammonia*, he soon called and walked home, without the assistance of two friends who had accompanied him to my house. The fever was of the quotidian type, I gave *two* grains of quinine to take the following morning, he has never had since a return of the symptoms, and enjoys his usual health. My next patient was a prisoner in the jail, a stout robust fellow, attacked with fever of the tertian type, had one paroxysm, the hot fit extremely severe, violent headache, skin hot and dry, the intermission perfect—has had no medicine; ordered him to be bled, when the next cold fit had fully commenced—the result was as I anticipated, the paroxysm was instantly arrested, the hot and sweating stages scarcely observable, and no return of fever; ordering him some purgative medicine, he was discharged—four days subsequently, he got intoxicated, which brought on a return of his former symptoms; he was, by his own particular request, treated as before, and with the same agreeable result; the quantity of blood taken in the first instance amounted to 12 oz. in the second to 10 oz. A servant of my own was the next patient on whom I tried its effects, his fever was of the quotidian form; I bled him when the cold stage had fairly set in, after which he had no regular return of fever, except that for two days after, a slight disposition to recurrence of the symptoms manifested itself, which yielded readily to small doses of quinine: except a purgative, he took no other medicine, and has since continued well. It would be useless to enumerate the many examples I have had of the efficacy of this plan. The two last months have afforded me many opportunties of putting it to the test of experience, I can therefore with confidence recommend V. S as an invaluable remedy in this disease.

There are, however, some cases where it may be injudicious and even dangerous to adopt it, where in old ex-sanguineous subjects great debility and a complication of other diseases co-exist, but these are, I apprehend, few. In a case which I had lately under my care, in which the propriety of V. S. appeared questionable, I witnessed the best effects from the topical application of leeches.

An old servant, labouring under chronic enlargement of the liver, and an enormous spleen, has had tertian fever for the last sixteen months, for which quinine and various remedies have been taken in vain, applied to me lately; on examination I found that he suffered little from the diseased liver, but complained a good deal of the spleen, which became extremely painful during the fever, particularly in the cold stage: I directed the application of six leeches for three successive periods with a calomel purge; from this mode of treatment he derived the greatest benefit; pain and tenderness of the spleen much diminished, and a postponement or irregularity of the paroxysms, with a sensible decrease in severity—the subsequent exhibition of of quinine, which before proved useless, now manifested its usual powers as a Febrifuge, and the poor man continues free from fever, his other complaints nearly in statu quo.

In this instance, it is, I think, clear that fever was kept up partly from the influence of habit, but in a much greater degree, from the diseased spleen being unable with impunity to bear the increased influx of blood, which is directed in an especial manner, to this organ in intermittent fever.

I abstain from offering any observation as to the "quo modo" of its action, this being a subject which requires, for its proper consideration, more time and talent than I can bestow; I should hope that some one more competent for the task would undertake it, content to add my humble efforts to that of others in recording the advantages to be derived, from the employment of a remedy at once simple and efficacious.

I cannot conclude without observing, that I feel myself indebted to Mr. Twining for having drawn my attention, and, I believe, that of the profession in this country to this subject—a circumstance which, in itself, entitles the practice to favorable consideration, coming forth, stamped with the authority of one, whose zeal, in scientific pursuits, is always so conspicuous, and whose unbounded experience and sound judgment, so fully qualify him to form a correct estimate of its value.

T. C.

Mofussil, Dec. 19, 1834.

TREATMENT OF HŒMORRHOIDS.

Extract of a letter from Dacca, dated 19th Nov. 1834.

There is a practice prevalent in Dacca of removing Hœmorrhoids however bad, and from patients in the last state of debility. It is done by the application of corrosive substances, after which the Hœmorrhoids protrude (and as far as I can understand a part of the Rectum) another corrosive is applied, and at the end of from seven to nine days the whole mass is separated, after which emollient dressings are applied, and

the patient gradually recovers. The pain is excruciating, until the separation, when immediate relief takes place. The practice is highly successful; only one fatal case in 100 being known, but very disagreeable symptoms frequently follow, of insensibility of the lower extremities, or involuntary twitchings, but these yield to time and treatment—four of my servants have undergone the operation successfully, and the lower extremities are restored to their natural function—a fifth who thought proper to salivate himself, with the vapours of cinnabar *to cure the twitchings*, has lost the use of arms and legs—but the Hœmorrhoids are cured.

A most favorable opportunity for satisfying yourself as to the nature and progress of the cure offered itself. I enclose the direction of a very respectable and well educated Hindostani gentleman now residing in Calcutta who (if you will send a person to appoint an hour within two or three days) will wait upon you and describe his case —The only symptom, which it is necessary for me to mention, is that for two or three months previous, Lamb had found his pulse at 120 or above it—his family residence is at Dacca where he is highly thought of.

C.

ZOOLOGICAL PLAGIARISM.

To the Editors of the India Journal of Medical Science.

Mr. Editor.—Did you ever happen to meet with an instance of *convenient ignorance* on the part of the nomenclators of science? Because if not, you will perhaps allow me to point out a few, the notice of which seems called for, unless those who in this foreign land bestow so much pains upon collections of Natural History, are to have *all the credit*, not attaching to a *mere collector*, rifled from them by the closet students at home. A friend of mine, who for the last 12 years has amused his leisure with zoology, and whose extensive portfolios of drawings and notes have not yet seen the light, from a disinclination on his part to produce crudities in print, has yet from time to time given to the public some of the more rare and curious of his treasures, through the channel of the Asiatic Society's Transactions. Now surely this is a work which all naturalists at home, whose object is simply the advancement of science and not of their own pretensions merely, must consult. Yet it is only necessary to turn to the ponderous tome of Gould, which in its collective mass has lately reached us from home, to perceive repeated instances of the wilful neglect of that work, the better to sustain claims to *discovery* forsooth of "most interesting forms," which had been given to the world some years previously, in its pages. Lest I should grow tedious I will but advert to two instances; Gould's first plate and description refer to a bird which he makes the type of a new genus,—Hæmatorius, with the trival name Residulatus. His 79th Pl. again pourtrays another most remarkable bird which he acknowledges to be the most interesting yet discovered in the hilly regions of India. This too he makes the type of a new genus, Ibidorhyncha; dedicating the species to its alleged discoverer Mr. Struthers, under the style of I. Struthersii.

Now, whoever will turn to the Transactions of the Asiatic Society of Bengal will find accurate drawings and descriptions of both these birds; the former under the name of Circæetus Nipalensis—the latter, under that of Red-billed Erolia. The papers in question were written in 1829, that is, 5 years ago: so that the pretence of novelty on the part of Mr. Gould is idle, if not worse?*

I am, Mr. Editor, faithfully yours,

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* The work appeared in Nos., quoad the Plates: the text is just out, the vol. bears date, 1832, which is the date of the first No. I suppose.

NOTE.—We have not Gould's Century of Birds to refer to; but knowing from whence this letter comes, we should have no doubt of the fact advanced therein, even were we not aware of the practices of the Closet Naturalists in similar instances. However, it is very probable that, Mr. Gould may not have seen the volume of the Transactions of the Asiatic Society to which Vindex refers, and therefore be quite innocent of intended wrong. The matter of a name, perhaps, is but of little moment; but we can sympathize with the feelings of the man who has toiled in the field, and the forest, to judge for himself; and then has the credit of his labours snatched from him by another, who has, perchance, never stirred from his own fireside. So much heart burning has been caused by this, that we recommend the Zoological Society to establish a Committee of claims, who shall be empowered to receive complaints, and whose decisions upon disputed points shall be recognized and considered final by the Society, and published in the volumes of its Transactions.

Eds. Ind. Jour. Med. Sc.

SELECTIONS.

ON THE INFLUENCE OF COLOUR ON ODOURS.

By Dr. Stark.

My first experiments on odours, made some years ago, were with articles submitted to the action of odorous substances, by being inclosed with them in drawers or boxes

for a certain period, and the amount of attraction ascertained by the intensity of smell. In all these experiments, however, reliance had to be placed upon one sense alone, viz. that of smell, as none of the substances employed had gained any appreciable weight. I was therefore desirous that, if possible, at least one experiment should be devised, which would show, by actual increase of weight, that one colour invariably attracted more of any odorous subtance than another, and upon considering the various odorous substances which could be easily volatilized without change, and whose odour was inseparable from the substance, I fixed upon camphor as the one best suited to my purpose. In an experiment of this nature, it was necessary that the camphor should be volatilized or converted into vapour, and that the coloured substance should be so placed as to come in contact with the camphor while in that state. It was therefore, of the first importance to prevent currents of air within the vessel in which the experiment was conducted, and with this view I used a funnel-shaped vessel of tinplate, open at top and bottom. This rested on a plate of sheet iron, in the centre of which the camphor to be volatilized was placed. The coloured substances, after being accurately weighed, were then supported on a bent wire, and introduced through the upper aperture. This was then covered over with a plate of glass. Heat was now applied gently to volatilize the camphor; and when the heat was withdrawn, and the apparatus cool, the coloured substances were again accurately weighed, and the difference in weight noted down.

Proceeding on this plan, I arrived at the most satisfactory and conclusive results. The deposition of the camphor in various proportions on the coloured substances submitted to experiment, offered evidence of the particular attraction of colour for odours, resting on ocular demonstration; and when to this is added a positive increase of weight as ascertained by the balance, the conclusion previously drawn from the sense of smell are confirmed in a singular and very satisfactory manner. I have in this mode repeated all the former experiments with differently coloured substances; but shall here only detail a few, as sufficient to show the general results:—

1. I took ten grains of *white* and the same quantity of *black* wool, and having suspended them in the manner stated, vaporized the camphor. When the apparatus cooled, I found, on weighing the wool, that the *white* had gained $1\frac{5}{10}$ grains in weight and the *black* $1\frac{8}{10}$ grains.

2. In a similar experiment, but using three colours of wool, *white, red,* and *black,* I found the *white* wool had gained $\frac{3}{10}$ of a grain; the *red* $\frac{8}{10}$; and the *black* $1\frac{4}{10}$ grains.

3. In another, where the heat was applied for about ten seconds, the white had gained no appreciable weight, and but little smell; the red had gained $\frac{1}{20}$ of a grain; while the black had acquired $\frac{2}{20}$ of a grain.

4. In an experiment with *black, red, green,* and *white,* the results were:—

Black gained in weight $\frac{3}{10}$ of a grain.
Green ..... $\frac{2.5}{10}$
Red..... $\frac{2}{10}$
White..... $\frac{1}{10}$

5. In a experiment with *black, blue, green, red,* and *white,* 10 grains of each, the result stood thus:—

Black gained in weight $1\frac{2}{10}$ of a grain.
Dark Blue..... $1\frac{2}{10}$
Scarlet Red..... 1
Dark Green..... 1
White..... $0\frac{7}{10}$

In repeating this experiment the *dark green* was $\frac{7}{10}$ while the *red* was only $\frac{6}{10}$; the others in the order as before.

I now varied the experiment by employing square pieces of card of equal size, coloured with different preparations of lead. This was done with the view of ascertaining whether smooth surfaces of equal density, and coloured as nearly as possible with a pigment of the same nature, would absorb odorous particles with the same facility as loose portions of wool. The colours were mixed up with a solution of gum-arabic and laid on the cards as equally as possible with a camel-hair pencil.

6. Pieces of card of equal size being coloured, as mentioned, with various preparations of lead, viz. *red, brown, yellow,* and *white,* and previously weighed, were exposed to the vapour of camphor in the vessel before described. After exposure for some time, and when cool, it appeared on weighing, that the

Red had gained.... 1 grain in weight
Brown..... $\frac{9}{10}$ of a grain
Yellow..... $\frac{5}{10}$

White..... a trace.

The whole of the upper surfaces of the *red, brown,* and *yellow* cards were covered with a fine light downy deposit of camphor. The *white* had an extremely fine deposit on its surface, but inappreciable by a very fine balance.

7. Another experiment with cards coloured *black, red, brown, yellow,* and *white,* exposed to the vapour of camphor, gave the following results :

Black had gained 1 grain.
Red ..... $\frac{9}{10}$ of a grain.
Brown..... .... $\frac{7}{10}$
Yellow ..... $\frac{5}{10}$
White..... $\frac{4}{10}$

8. In a similar experiment with cards coloured *black, dark blue, dark brown, orange-red,* and *white,* the attractive powers were as follow :

Black gained..... $\frac{9}{10}$ of a grain.
Dark blue..... ..... $\frac{8}{10}$
Dark brown..... $\frac{4}{10}$
Orange-red.... ..... $\frac{3}{10}$
White ..... $\frac{1}{10}$

In all these experiments, it was invariably found that the *black* attracted most, the *blue* next; then followed the *green* and *red;* after these the *yellow* and *white.* The heat was never continued so long as to warm the apparatus, else the whole camphor would have been driven off. Neither was such a quantity of camphor used as would have given a thick coating to the substances employed, as then the attraction of the coloured surfaces might have been diminished.

1. The next set of experiments were intended to ascertain the comparative attraction of animal and vegetable substances. The first of these were upon equal weights of black wool and silk, ten grains of each exposed to the vapour of camphor in the manner already stated. The *black wool* gained $1\frac{5}{10}$ grains, the *black silk* $1\frac{7}{10}$ grains. From this experiment, it would appear, that of these two animal substances *silk* possesses the greater attraction for odours.

2. In equal weights of *white wool* and *white cotton,* the *cotton* gained $\frac{3}{10}$ of a grain ; the *wool* $\frac{4}{10}$.

3. In another experiment with *white silk, white wool,* and *white cotton,* ten grains of each, the result was,

Silk had gained..... $3\frac{5}{10}$ grains in weight
Wool ..... $2\frac{4}{10}$
Cotton ..... $2\frac{2}{10}$

4. In a similar experiment, with the usual weights of the same articles,

Silk had gained..... $1\frac{4}{10}$ grains in weight.
Wool .... $\frac{5}{10}$ of a grain.
Cotton..... ..... $\frac{4}{10}$

5. Another experiment, in which *black silk, black wool,* and *black cotton,* were exposed in equal quantities of the usual weight to the vapour of camphor, as before described, gave this result,

Black silk gained.... $\frac{2}{10}$ of a grain.
Black wool.... .... $\frac{1}{10}$
Black cotton..... $\frac{1}{20}$

6. In an experiment with *white silk, white wool, white cotton,* and *white card,* each weighing ten grains, and exhibited as before, the following were the results :

White silk had gained $1\frac{9}{10}$ grains in weight.
White wool..... $1\frac{1}{10}$
White cotton,..... 1
White card.... ... $\frac{4}{10}$ of a grain.

These last experiments tend to shew, that different substances attract odours in different proportions, and this independent of the texture or fineness of the substance employed. Wool, though generally coarser in the fibre than cotton, has yet a greater attraction for odours ; and silk more than wool. The general conclusion would appear to be, that animal substances have a greater attraction for odours than vegetable matters ; and that all these have their power much increased by their greater darkness or intensity of colour. These experiments seem also to establish, that the absorption of odours by coloured substances is regulated by the same law which governs the absorption of light and heat. The analogy goes still farther, for in other experiments which I made with a view to ascertain this point, I invariably found, that the power of colour in radiating or giving out odours, was in strict relation to the radiation of heat in the same circumstances. My first experiments in this branch were with differently coloured wools, inclosed for a certain time in a drawer along with assafœtida and camphor, and afterwards exposed for a specific period to the action of the air. Though one can easily judge by the sense of smell alone the dif-

ferent intensities which these articles have acquired immediately on being taken out of the drawer, yet, after exposure for some time to the air, the difference of intensity is much more difficult to be perceived. In general, it seemed to me that the whole of the substances lost their sensible odour in nearly the same space of time, though the odorous particles given out by the black were, of course, much greater in quantity than in the others. To demonstrate this, I took pieces of card, coloured as before, *black*, *dark blue*, *brown*, *orange-red*, and *white*, and, after having exposed them to the vapour of camphor, in the usual manner, they were taken out of the vessel, weighed, and exposed in the apartment for twenty-four hours. Upon carefully weighing the cards at the end of this period, it was found that the *black* had lost one grain; the *blue* nearly as much; the *brown* $\frac{9}{10}$ of a grain; the *red* $\frac{8}{10}$; and the *white* $\frac{5}{10}$. In about six hours afterwards, the *black* and *blue* had completely lost their camphor; the *brown* and *red* had the merest trace, inappreciable by a delicate balance; while the white still retained about $\frac{1}{30}$ of a grain.

In another experiment with cards coloured *dark blue*, *dark brown*, *orange-red*, *yellow*, and *white*, they had gained in weight, after exposure to the vapour of camphor,

Dark blue .. .. $\frac{9}{10}$ of a grain
Dark brown .... $\frac{8}{10}$
Orange-red .... $\frac{6}{10}$
Yellow ..... $\frac{5}{10}$
White ..... $\frac{4}{10}$

After lying in the apartment for twenty-four hours, the cards were again carefully weighed, when the camphor remaining was found to be, in the

Dark blue .. .. $\frac{1}{30}$ of a grain.
Dark brown.... $\frac{1}{10}$
Orange-red .... $\frac{2}{10}$
Yellow ..... $\frac{1}{10}$
White.. ..... $\frac{3}{10}$

Hence in the same space of time the loss in each was blue $\frac{22}{30}$; brown $\frac{21}{30}$; red $\frac{12}{30}$; yellow $\frac{12}{30}$; white $\frac{3}{30}$.

The influence of coloured surfaces upon the absorption and emission of odours, having, I trust, been satisfactorily shewn, it only remains to state shortly some of the practical conclusions which may be drawn from the experiments detailed.

If it be thus certain that odorous emanations have not only a particular affinity for different substances, but that the colour of these substances materially affects their absorbing or radiating quality, the knowledge of these facts may afford useful hints for the preservation of the general health during the prevalence of contagious diseases. From their minute division and vast range of action, latent poisonous exhalations or effluvia, inappreciable by the balance, may no doubt exist to a dangerous extent, without being evident to the sense of smell. But in most cases it will be found, that, when contagious diseases prevail to such extent, the emanations from the sick will, if attended to, give the surest indications of the contamination of the surrounding air. Besides, even if we allow that infectious emanations have no necessary connexion with odours, the preceding experiments will afford the strongest possible presumption, that the emanations of an infectious nature, in common with odours, vapours, and emanations generally, are emitted on the one hand, and on the other received, according to the same general laws.

Experience has sufficiently proved, that emanations once generated in, or communicated to, the human body, may be conveyed from one individual to another, and even, through the medium of clothing or merchandize, from one place to another. This has been particularly observed in plague; and hence in countries where this disease is liable to occur or be imported, the institution of quarantine establishments, to prevent personal intercourse or the dispersion of goods, till a certain number of days have elapsed, during which the disease, if existing, should appear;—articles of merchandize and clothing being at the same time purified by exposure to the air, or fumigated. Though this transport of disease has been more particularly observed in plague, yet instances of the same nature have occurred in other diseases, more particularly small pox, and more recently it has by many been supposed in cholera.

It is unnecessary to detail the means of purifying infected goods, or fumigating the apartments of those who have been known or suspected to labour under diseases supposed to be communicated by contagious effluvia. It is sufficient to state, that exposure to a high temperature, fumigation with chlorine and sulphur, and free exposure to the air, are found amply sufficient for the first; and apartments are more generally recommended to be purified with chlorine, and washed with caustic lime. As to fumi-

gations with chlorine, it cannot be denied that this will destroy the effluvium floating in the air exposed to its action; but unless this fumigation be frequently repeated, it can have but little effect, as the walls and furniture will be constantly contaminating the air, by giving out the deleterious particles which they had previously absorbed. Lime washing has generally been supposed to act in the same manner as fumigations, viz. by destroying the contagious emanations; but from the experiments of Guyton Morveau, it would seem that caustic lime, and indeed lime in any state, has no such effect. It merely absorbs the gases which disguise the odour, but neither changes its deliterious properties nor alters its real smell. He, therefore, disregards lime-washing, except as a general mode of cleaning walls, and attributes no other beneficial effect to it than as contributing to cleanliness.

The result of my investigations has led me to form a very different opinion. It is to white-washing that I should attribute much of the good effects that have been found to follow the purifying means generally employed. In such cases I should trust more to white-washing the walls, personal cleanliness, and free ventilation, for destroying or diminishing the effects of supposed pestilential or hurtful effluvia, than any other measures. Acid and other fumigations, except chlorine, only disguise, but do not destroy, the property of animal effluvia to produce disease.

In the late epidemic cholera here, it is well known that this disease broke out in the village of the Water-of Leith, situate a little to the north-west of Edinburgh, and lying on both sides of the stream of that name. Many of the inhabitants were seized with the disease, and fell victims to its severity. If a damp and low situation, with accumulated filth of all kinds, render disease more fatal, this was certainly a place likely to suffer severely, and at first it did so. But the Board of Health, with that promptitude for which they were distinguished, quickly got all the filth, so far as practicable, removed, the houses fumigated, and the walls white-washed outside and inside. By these means the disease seemed at once to be arrested, its virulence was much abated, and it gradually declined. The fumigations in this case could only act upon the deliterious emanations in the air at the time; but unless constantly renewed, could not affect the fresh emanations generated from those labouring under the disease. The necessary ventilation must also have speedily carried off the chlorine. In white-washing, on the other hand, although it had no specific influence upon the contagious effluvium, yet, by constantly presenting a reflecting surface, prevented the absorption of the emanations by the walls, and thus tended, with moderate ventilation, to keep the air of the apartment pure. Dirty-coloured walls, on the contrary would readily, as has been demonstrated, absorb the noxious odours, and as soon as the effect of the fumigation was over, gradually give them out again.

The good effects of white-washing appeared strikingly in another instance at this particular time; for I venture to assert, that if human means had any influence on this disease, Edinburgh owes much of the mildness of its attack to the white-washing of its steep and narrow lanes and closes, the walls of the common-stairs, and most of the hovels inhabited by the lowest classes of the community,—not to the partial fumigations and sprinklings with chloride of lime, which the first breath of wind carried off. The white-washing of the walls prevented them from absorbing the deleterious emanations, and the currents of air were thus enabled to sweep them away, before they had accumulated to such a degree as to become an active source of disease.

Next, therefore, to keeping the walls of hospitals, prisons, or apartments occupied by a number of individuals, of a *white* colour, I should suggest that the bedsteads, tables, seats, &c. should be painted white, and that the dresses of the nurses and hospital attendants should be of a light colour. A regulation of this kind would possess the double advantage of enabling cleanliness to be enforced, at the same time that it presented the least absorbent surface to the emanations of disease.

On the same principle it would appear that physicians and others by dressing in *black*, have unluckily chosen the colour of all others most absorbent of odorous and other exhalations, and of course the most dangerous to themselves and patients. Facts have been mentioned which make it next to certain, that contagious diseases may be communicated to a third person through the medium of one who has been exposed to contagion, but himself not affected*; and in fact the circumstance of infectious effluvia being capable of being carried by medical men from one patient to another, I should conceive one of the means by which such diseases are propagated in the ill-ventilated and dirty habitations of the poor exposed to their influence.

Even in my own very limited experience, I think I have observed some melancholy instances of the effect of *black dress* in absorbing the hurtful emanations of fever

* See Treatise on the Epidemic Puerpural Fever of Aberdeen, by Alexander Gordon, M. D. Lond. 1795, pp. 63, 4.

patients in a public hospital; and many facts are incidentally noticed by medical writers and referred to other causes, which I should not hesitate to ascribe chiefly to exposure of this nature. Not to mention individual cases, in the sessions held at Oxford in July, 1577, ' there arose amidst the people such a damp that almost all were smothered." Lord Bacon attributes this effect to the smell of the jail, where the prisoners had been close and nastily kept; and mentions it having occured twice or thrice in his time, " when both the judges that sat upon jail, and numbers of those who attended the business, or were present, sickened and died."* A similar occurrence related by Sir John Pringle, happened at the Old Bailey sessions in 1750, when four of the judges were attacked and died, together with two others of the counsel, one of the under sheriffs, several of the jury and others, to the amount of about forty in the whole. My explanations of the peculiar fatality of these emanations to the judges, counsel, and jurors, was the peculiar attraction of their official black for the putrid effluvium, as Sir John calls it; and the escape of two of the judges who sat on one side of the Lord Mayor, to the current of air that was in the room not sending the baneful odours in their direction.—*Edinburgh New Philosophical Journal,* April, 1834.

ADHESION OF THE PLACENTA TO THE FUNDUS UTERI, SUCCESSFULLY TREATED BY ERGOT.

By E. Worrell, M. D., Surgeon to the U. S. Army.

This was the case of a black girl, the placenta being retained three days after delivery. She had severe pain in the region of the uterus; hot dry skin; pulse 120, and very small; a most disgusting stench was observed on removing the bed-clothes; the introduction of the finger gave her intense pain; the edges of the os uteri were firmly contracted and unyielding; by drawing the cord gently, the adhesion was found to be at the fundus. Fifteen grains of ergot were administered, and five such doses were given at intervals of half an hour each. Immediately after the fifth dose, the os uteri dilated, and the placenta came away. The girl did well, with the exception of a slight phlegmasia dolens, which yielded to simple remedies.—*American Jour. of Med. Sciences,* May, 1834.

* Pringle's Observations on Diseases of the Army, p. 296.

SALIVATION BY SARSAPARILLA.

It is mentioned by Cox, in his Narrative of a Residence on the Columbia River, that several of his party who used the fresh sarsaparilla, which grows in abundance in this situation, were salivated by it. This fact is interesting as connected with the antisyphilitic and antimercurial powers of the remedy. We do not know whether the homœopathists have got possession of this circumstance, but if not they are heartily welcome to it.—*Dub. Jour. of Med. and Chem. Science for Sept.* 1834.

HEREDITARY RESEMBLANCES.

In the Philosophical Transactions for 1821, are two papers illustrative of this curious subject. Lord Morton being desirous of domesticating the quagga in this country, endeavoured to procure some individuals of the species; but being disappointed in obtaining a female, gave a male to an Arabian chesnut mare: the issue was a female hybrid, which showed her mixed origin both in form and colour. The same Arabian mare was afterwards bred from by a black Arabian horse, and the result was, a filly the first year, and a colt the year after, both of which, though fine specimens in most respects of their Arabian origin, were yet marked with certain stripes and lines characteristic of the quagga; nor were the manes those of the Arabian breed. The second communication on this point is one by Mr. Giles, in which he states, that in the litter of a black and white sow, by a wild boar, the chesnut colour of the boar prevailed; that a second litter from the same sow, by a boar of a very different breed, retained many peculiarities of the former sire; and that even in a third litter, the chesnut colour was to a certain extent evident. These are surely striking facts, shewing how hereditary peculiarities not belonging to the female may be transmitted by her, in successive instances, to the offspring of a male who has them not.—*Lon. Med. Gaz. Aug.* 1834.

TREATMENT OF ACUTE TONSILLITIS.

To the Editor of the Lancet.

Sir,—Mr. Horne, in his communication to you on the use of the nitrate of silver in Acute Tonsillitis, seems to be of opinion that the nitrate enjoys a superiority over any other plan of treatment hitherto adopted in similar cases; but, Sir, with your permission, I will detail a case or two in order to bring under notice a still more efficacious remedy in that complaint; such at least I have lately found it in those instances

which have afforded me an opportunity of using it.

Case 1.—On the 11th of April, 1834, I was requested to visit Jane Ward, ætat. 20 years, of rather slender make and scrofulous constitution, who had been under treatment since the latter end of March. Treatment: V. S. adj lb. Pulv. Jalap. grs. xv. Submur. Hydr. grs. v. Misce. Fiat P. C. I promised to visit her in the evening for the purpose of lancing the tonsils, but was prevented. 12th. Cut both tonsils horizontally with a dissecting scalpel to a considerable depth. Ordered the patient to gargle the mouth and throat frequently with warm water so long as any bleeding continued. This patient was up and stirring about the house on the 13th.

Case 2.—On the 25th of April, 1834, I was called to Jane ....,upwards of 20 years of age, of a full and robust habit of body; both tonsils were exceedingly enlarged and inflamed, threatening suffocation and occasioning delirium. V. S. adjlb.; both tonsils were cut as in the above case. Patient says that she has found great relief, the sense of suffocation being entirely removed, and deglutition being almost as easy as during health. This patient left her bed, and went into an out-kitchen on the 3rd day. She was attacked with erysipelas of the face and head on the 4th, which was removed a few days after, but she had no increase or relapse of the sore throat.

I now adopt the same plan of treatment in patients of all ages, with this exception viz., that of applying leeches to the throat of children instead of bleeding at the arm.

Here, then, we have a remedy always at command, capable of removing the disease in 24 or 48 hours, unless suppuration have taken place before professional advice has been sought. Indeed, even if suppuration have already formed in the glands, nothing sets them at liberty sooner than cutting them and letting out the matter. The operation scarcely produces any pain, and the tonsils seem to me to have a remarkably quick tendency to heal up after it.

In conclusion, I may remark, that a kind of *phagedenic ulcerated sore throat* prevailed here in March and April last. It in general attacked children and young people, from the ages of two years up to twelve and fourteen, and spread in an extraordinarily rapid manner. It did not confine its ravages to the glands and fauces alone, for in one instance I observed it to attack the mucous membrane of the throat as well. It proved extremely fatal amongst the little ones. The remedial measures which proved most successful in my hands were, the warm-bath, antimonials in conjunction with calomel, and gargles with *acid. muriat.* I have no doubt but that many cases proved fatal from the want of gargles and other suitable local remedies, as every practitioner must be aware of the difficulty of inducing children to gargle their throats, or of applying anything locally to them.

I am, Sir, your obedient servant,

E. Wilkinson.

Aspatria Cumberland,
August 11th, 1834.

[*Lancet August*, 1834.

LOSS OF THE SENSE OF SMELLING.

I had lately an opportunity of observing a very singular case of the total loss of the sense of smelling, occasioned by exposure to the effects of a very strong and disagreeable odour. Mr. ——, formerly a captain in a yeomanry corps, was attended by Mr. Barker of Britain-street and myself. He was affected with ascites, and in the course of conversation one day, mentioned that in the Irish rebellion of 1798, information was received by the magistrates, that five hundred pikes were concealed in one of the markets of this city, buried at the bottom of a large cesspool, which was filled with the offscourings of the market and all manner of filth. He proceeded to the place, and superintended the work of emptying out the cesspool, at the bottom of which the concealed arms were found as specified. During this operation he was exposed to most abominable effluvia, and suffered greatly at the time from the stench. Next day he found that he had become entirely insensible to odours, and since that, now a period of thirty-six years, he has remained completely deprived of the sense of smelling. From this it appears, that as exposure to very intense light may produce amaurosis, so exposure to intense odours may produce a corresponding affection of the olfactory nerve.—Dr. Graves *in Dub. Jour. of Med. and Chem. Science. Sept.* 1835.

TREATMENT OF SORE NIPPLES BY NITRATE OF SILVER.

To the Editor of the Medical Gazette.

Sir,—There are few sources of suffering, of an apparently trifling nature, productive of greater misery, than chaps, abrasions, and inflammation of the nipples, in nursing women. For a long time, I tried all the measures usually recommended both regularly and empirical, to cure them; but I never had any reason to congratulate myself on my success. I hear daily of the distress occasioned by such accidents; and having at length fallen on a method of treatment which never fails to give immediate relief, and ultimately to effect a

cure, I cannot withhold it longer, lest there be even one practitioner in extensive practice who may be unacquainted with it, and so lose the benefit of a remedy which I regard as a blessing to every woman in the condition before mentioned. Indeed, under my impressions of its value, I should be culpable in not making it known. Many, perhaps, may know it; but there are certainly many who do not, much to the loss of their puerperal and nursing friends and patients; and for the sake of these I may be excused for troubling you.

My method is briefly this. Having gently, but carefully, dried the nipple, touch it freely with a sharp pencil of nitrate of silver. Be sure to insinuate the pencil into the chaps or chinks; then wash the nipple with a little warm milk and water. In most instances, the pain, though smart at first, soon subsides, and a little simple ointment, or one made with the flowers of zinc, is all that is requisite to heal the sore. I occasionally wash the nipple with a saturated solution of borax, before and after suckling the infant. Some suffer a great deal of pain from the application of the caustic; this must not be heeded. A draught, containing an opiate, such as Sol. Mur. Morph. 30 drops, soon brings relief, and the part is presently easier. Some require to be touched more than once,—nay, several times; but each succeeding time it is less painful. I have heard of a solution of nitrate of silver being tried; I can positively assert that it is inferior to the solid caustic, both in relieving and healing these painful affections. Now, my apology for asking you to insert these remarks is, that I am deeply impressed with the value of the remedy recommended, and should consider myself much to blame if I did not communicate a fact which I am sure will be highly useful to some, if not a very large proportion, of the profession.

I am, Sir, your obedient servant,
ALEX. J. HANNAY, M. D.
Anderson's University, Glasgow,
July 25, 1834.

[*Lon. Med. Gaz., Aug.* 1834.

USE OF THE SPLEEN AND THYROID GLAND.

The sanguiferous structures of the spleen and of the thyroid gland resemble each other; they are alike extraordinarily supplied with red blood, neither of them possess excretory or discharging ducts, such as belong to the liver and to the secerning glands; in neither of them is there any parenchymatous pulp to lodge and dispose the minute secerning capillaries; a substance so remarkably embracing the penicilli of the liver, the cryptæ of the kidney, and the ultimate secerning vessels of the pancreas and other similar glands.

The deficiencies of excretory ducts, and of a parenchymatous matrix, occur without exception in the spleens and thyroid glands of all the animals hitherto investigated. Another striking coincidenee between the sanguiferous vessels of the spleen and of the thyroid gland, appears in their most common morbid states. Enlargements of the spleen happening after inveterate agues, as well as the br onchocele, seldom exhibit any deviation from natural structure beyond an augmented laxity and extension of their respective blood vessels and membranous tissues. There is also a remarkable paucity of nerves assigned to the spleen and to the thyroid gland when compared with the nerves sent to the secerning glands; but as I would not rest this assertion upon my own recollection of the facts, I have applied to Mr. Joseph Swan, of Lincoln, whose recent assiduous and accurate tracings of the nerves, surpasses the merits of his contemporaries. Mr. Swan informs me, that the relative proportions of nerves sent to glands are placed in the following order. I. The testicle. II. The kidney. III. The liver. IV. The pancreas and the salivary glands. V. The absorbent glands; and lowest of all the spleen and the thyroid gland.

* * * * *

Since no sensible or chemical alteration has been detected in the venous blood, returned either from the spleen or the thyroid gland, and their nervous supplies are manifestly less than those of the secerning glands, we may reasonably infer that no other change happens to the blood in those organs but that of becoming venous.

A similar venous change, however, occurs in the arterial blood, poured into the cavernous and spongy bodies of the penis, for their temporary distension: and with the vascular arrangements of those parts, the structure of the spleen singularly agrees.

* * * * *

That the functions of the spleen and of the thyroid gland are not essential to animal life, is shown by the instances of whole tribes of creatures utterly destitute of those parts. The spleen has also been often extirpated by experimentors, without noticeable damage to any of the animal functions, and the thyroid gland has been removed by surgical operation without any observable consequences.

The spleen and the thyroid gland may be therefore regarded as auxiliaries to more important organs; such subsidiary aids being very frequent in all complicated examples of animal organization; and in the

structures of the human body, many of those appointments have been made for the accommodation, or for the more convenient performance of especial offices; in fact, the greatest proportion of animal structures are subsidiary; and mere accessories to the principal offices of life.

* * * * *

The contiguity and vascular connections between the spleen and the stomach are sufficiently known, and the notoriety of those attachments has produced many theories upon the uses of the spleen.

The extreme supplies of red blood to the spleen, and its necessary consequent high temperature, when compared with the scantiness of red blood allotted to the stomach and to the intestines, has occasioned a generally admitted inference, that the spleen transmits heat to the stomach above the rate of its own capacity to furnish heat; and hence it has been concluded by many persons, that the heat derived to the stomach from the spleen is conducive to digestion. To a certain extent this opinion is reasonable, for heat liquifies many alimentary substances, and aids in their maceration, but heat is inadequate to produce those animalizing changes which the stomach is known to effect.

The temperatures of the entire bodies of whole tribes of animals are regulated by their respective proportions of red blood, and the different structures of man and quadrupeds possess more or less of power to maintain the ordinary heat of the whole body, as they are respectively supplied with red blood.

This unequal dispensation of animal heat exposes many parts to a passive reduction of temperature: the effects of which are, a diminution of sensibility, and an abatement of muscular power; and to those effects induced upon the stomach by cold drinks and food, I solicit your attention; since I regard the compensating heat of the spleen to be the natural provision against the torporizing influence of low temperature suddenly applied to the nervous and muscular structures of the stomach.

The human stomach on its front, upper, and right aspects, is contiguous to that highly sanguinious organ the liver, but the great *cardiac* portion into which the food and drink first descend, would be exposed to temporary suspensions of the sensorial and muscular functions whenever cold aliments are taken, had it not been for the ready communication of heat from the moving mass of red blood contained in the spleen, and whose transmitted temperature together with the copious supply of arterial blood sent directly through the vasa brevia and the gastrica sinistra unequivocally prove, that heat must be largely yielded by an organ gifted with high temperature, to a contiguous part of less calorifie power.

Before I advance to the ultimate objects of this Memoir, I will adduce some general statements to show the constant alliance between temperature and the sensorial functions and muscular motions, assuming the relative supplies of red blood to be the visible indications of animal heat.

* * * * *

The sensibility of all nerves is intimately connected with temperature, and hence the parts assigned to receive sensible impressions, are carefully secured against the casual loss of their standard heat. The ends of the fingers possess a singular complexus of nerves and red blood vessels, the latter being in remarkable excess with regard to the other parts of the skin, and as the tips of the fingers are the chief seats of the sense of touch, this high vascularity may be deemed a protection against cold.

Numbness of the fingers from external cold is not however the only instance of their occasional loss of sensation and motion; the state vulgarly called dead fingers, arising from a morbid stoppage of the blood, producing similar effects.

In the eyes of albinos and white rabbits, the red colour of the choroid coat is visible through the pupil, and the tremulous motions of the iris in those instances, point out the use of tbe opaque pigment as a screen to the ciliary nerves. If it be objected that the high red vascularity of the nostrils is as likely to be given for the secretion of mucus as to supply heat; that opinion may be put down by the evidence of the colourless state of the purer mucous membranes which form the interior of the urinary bladder, of the intestines, and of the synovial surfaces.

* * * *

The whale tribes are indued with the highest animal temperature, it being more than ten degrees above that assigned to birds and land quadrupeds: they have also the largest proportion of deeply coloured blood. There is a singular mass of cylindrical convoluted blood vessels placed on each side of the spine within the bodies of porpoises and whales; and it has excited the wonder of physiologists, since its notification by Dr. Tyson. This congeries of large red blood vessels covers, and is in contact with, the intercostal and splanchnic nerves; and it appears to be an especial provision to afford heat to those nerves; so immediately exposed to cold air during respiration: for, without this interposition of hot blood, the vital nerves of whales would have been nearly in contact with the lungs, receiving an atmosphere often below zero.

The hairy covering of the human scalp has been inconsiderately and childishly deemed a mere ornament, but pathological anatomy proves it to be of real use. The upper masses of the brain are the most exposed to the vicissitudes of temperature; and the stroke of the sun in hot climates as well as the torpor or fatal sleep which befals persons when exposed to intense cold, evince the protecting services of a bad conducting cap of hair, placed directly over the most exposed parts of the brain; indeed the experience of mankind, whether civilized or rude, has led them to wear turbans and other coverings for the head in addition to the natural appendage. Perhaps also, the axilliary tuft of hair is intended as a defence against cold to that most exposed plexus of nerves, which supplies the arm; while the close entanglement of the axillary nerves with the contiguous blood vessels may be for the same end.

* * * *

If it should be conceded by this learned assembly, that a given temperature is essential to the vital functions of the sensorial structures, and to muscular action; and that the position and the organization of the spleen, manifestly supply heat to that portion of the stomach where heat is most needed; where there is often a sudden and paramount demand for it; and where no other adjacent part is capable of doing that service; then the intended use of the spleen may be justly regarded as auxiliary to the functions of the nervous and muscular structures of the stomach; and although the heat conveyed from the spleen to the stomach is in this way subsidiary to digestion, it cannot be considered the immediate agent of that complicated process.

The foregoing reflections have induced me to assign a heat-giving power to the thyroid gland similar to that of the spleen, because the local adaptations of the thyroid gland to the trachea and larynx must necessarily furnish heat to the nerves and muscles of the organ of voice, whose bloodless cartilages are exposed both within and without to the effects of atmospheric changes, and perhaps the goitre is no more than a natural effort to uphold the temperature of those parts under certain influences of climate; but this occasion does not permit an extension of these observations, I will therefore reserve for a future time, a more general review of the physiology of glands and other structures, now rendered apparent dependencies on the physical adaptations of the blood vessels.

In this country, and at the present time, there is no part of medical science so much behind the average rate of current knowledge, as the physiology of glands; structures which induce changes in the elementary fluids of living bodies, little understood by vulgar teachers, from deficiencies in their education and habits, and which continually lead to the exhibition of their crude opinions in opposition to the first principles of philosophical induction.

I am not ambitious to become the sponsor of additional technical words, seeing that our profession is already clogged with a superabundance, yet I am strongly tempted to propose a generic name for the thyroid gland and for the spleen, since they do not perform the secerning offices of real glands—and if at any future period, this suggestion should be adopted, some term derived from the Greek verb ΘΕΡΜΑΙΝΩ, may probably be thought the most eligible by professional scholars. —*Sir A. Carlisle on the Use of the Spleen and Thyroid Gland.*

NEW OPERATION FOR FISTULA LACHRYMALIS.

M. Langier proposes a new operation for this troublesome complaint, by piercing the maxillary sinus. He has employed it with advantage, and other surgeons have been equally successful. The incision having been made into the sac in the usual manner, he introduces a small trocar, bent about six lines from the point, into the canal, and, turning the bent part inward, passes the instrument into the antrum with great facility; it is necessary to move it about a little in order to enlarge the opening thus made. The trocar being then removed, the external wound is to be closed. The tears will pass from the nasal canal into the antrum, and through the natural opening of that cavity into the nose.—*Lon. Med. and Surg. Journ., August,* 1834.

AMPUTATION—NEW METHOD.

On Saturday, July 26th, Mr. Guthrie performed amputation, a little above the knee, on a girl who has been for a long time suffering under disease of the knee-joint, which has resisted various modes of treatment. The operation was performed without a tourniquet, in order to save as much blood as possible (the patient being much reduced), and to show the pupils this rather novel mode of proceeding. Mr. Maitland compressed the femoral artery a few inches below Poupart's ligament, and the operation was completed in a very brief space of time. Not more than three or four table-spoonfuls of blood were lost, and the patient bore the operation with

comparative tranquillity. Mr. G. left a very large flap, which amply enveloped the extremity of the bone, and which, notwithstanding some unfavourable circumstances, promises to make a very good stump. This case is invested with more than ordinary interest, in consequence of the appearance of some very remarkable symptoms of nervous irritability, which showed themselves immediately after the operation. Her sufferings, which were apparently most intense, were considerably alleviated by the speedy administration of two grains of the acetate of morphine, which in two hours produced great tranquillity, and removed the unpleasant symptoms. Mr. White remarked that in private practice he was in the habit of using morphine with the greatest success in tranquillising the disordered nervous system. He considered it a most useful and excellent medicine in such cases.

The constitutional health of the patient has been daily improving, and the anxiety of countenance, emaciation of body, and constant pain, which characterised the case previous to the operation, have almost entirely disappeared. She has been ordered a pint of porter daily.—*Lon. Med. and Surg. Jour. Aug.* 9, 1834.

ABSENCE OF CERVIX UTERI IN LABOUR —VAGINAL CÆSAREAN OPERATION SUCCESSFULLY PERFORMED.

By Dr. Caffe, of Paris.

I was sent for by Madame Mouray, midwife, on the 4th December, 1833, to the house of a patient, No. 110, Vielle Rue du Temple. The patient was nearly 40 years of age, and of good constitution; had borne three children, the last 8 years since, and had now been in labour 30 hours. The midwife, unable to feel the mouth or any orifice in the uterus, had previously obtained the assistance of a medical man, who, believing there was an antiversion of the uterus, had recommended the introduction of a pessary. I examined her in various positions, but, neither with the finger nor a small blunt-ended probe, could I discover any orifice in the uterine tumour. The vagina was five inches long, dry, but swollen on its upper surface, where the mucous membrane projected considerably. Uterine contraction was regular and active. This was at 6 A. M. Judging that the vaginal Cæsarean operation was here indispensable, I desired a consultation; and at 8 o'clock, M. Hatin saw the patient with me. We fixed the hour of 4 P. M. for the performance of the operation; but as the contractions of the uterus were not then of alarming violence, we agreed still further to postpone it, and, while the midwife carefully watched the patient, to moderate the pains and prevent improper motion, we sought the counsel of MM. Velpeau, Lenoir, and Larcher, who successively examined the patient, and confirmed the accuracy of my diagnosis, and the necessity of operating. Accordingly, at 11 P. M., I proceeded to the operation in the presence of MM. Hatin and Roussel, and M. Pertusio, an Italian physician.

The speculum could not be employed, on account of the projecting mucous membrane and the extreme narrowness of the vagina. I used a straight narrow bistoury, with linen wrapped round it to within half an inch of the point, which was protected by a small piece of wax. The uterus was divided, layer by layer, to the extent of about half an inch, in a line, between the rectum and bladder, its contractions assisting the division. On arriving at the cavity of the uterus, about four ounces of liquor amnii were discharged; and the head of the child was distinctly felt by all present. To avoid and prevent laceration, I again introduced the knife, and practised two short lateral incisions, so as to convert the aperture into a crucial one; which shape, however, was immediately effaced by a pain which rendered the aperture oval, and enlarged it considerably, but without any tearing of the edges.

The women felt no pain during the operation, nor was there the least hæmorrhage; in an hour afterwards a living child was born. The uterus, in contracting after delivery, greatly diminished the extent of the aperture; recovery was rapid and uninterrupted by any accident. As soon as the lochia had ceased to flow, I took the precaution to introduce occasionally between the lips of the aperture a gum elastic bougie, which was allowed to remain several hours. The aperture can be felt small and irregular, surrounded by no projection or trace of the neck of the organ. At the end of six weeks the catamenia appeared, and have since recurred. As regards the cause of this obliteration of the neck of the uterus, it was with the greatest difficulty that I could ascertain from the patient, that she had, during the early months of pregnancy, been in the habit of injecting a solution of common ashes (*cendres de foyer*) into the vagina, and even into the cavity of the uterus,(?) by means of a gum-elastic catheter; that she had felt each time intolerable pain, and had observed suppuration and the detachment of portions of the skin.—*Abridged from the Journal Hebdomadaire.—Archives of Medicine.*

Operation Saw.—We have had an opportunity, also, of examining another ingenious instrument, invented by M. Heyne, a German physician, who has been exhibiting its utility in the Parisian hospitals. It is a chain-saw, which is worked by two wheels and a handle. The saw revolves round the point of a machine, containing the works, and resembles in form a butcher's knife This is fixed by a sharp point, on the bow, the handle is turned, and the chain-saw revolves, while the knife approaches the operator. The bones are divided literally as if the operator were cutting the flesh with a scalpel. Not the slightest shock or disturbance is experienced in the instrument during is action.—*Lancet Sept.* 1834.

CLINICAL OBSERVATIONS ON VARIOUS DISEASES,

By Mr. Wardrop.

On a mode of removing tumours growing within the mouth, attached to the Bones

There are several distinct species of tumours, or polypi, which grow within the mouth, but the following observations apply only to those excrescences which either originate in, or are intimately connected with, the bones.

The tumours to which I allude are most commonly met with on the upper or lower jaw, at the base of the alveolar processes They appear to be composed, externally, of several rounded masses, of a dark purple colour, possessing a more or less soft, elastic, feel; and adhering, immoveably, by a broad base, to the subjacent bone. Tumours of this description also grow from the antrum and other cavities of the nose; and, if allowed to increase, sometimes attain an enormous bulk, and ultimately destroy life.

The modes which have been usually resorted to for removing such tumours are, *extirpation with the knife*, and the *actual cautery*.

In those cases where I have employed these means, failure has generally resulted; and I have often witnessed very cruel and severe operations fruitlessly resorted to, when thus attempting to remove large tumours of this description. The history of the two following cases points out not only an effectual, and easily manageable, but a much less formidable, mode of eradicating such tumours.

Case 1.—A youth applied to me on account of a tumour situated on the lower jaw, which had displaced, and occupied the situation of, two of the incisores and canine teeth, and extended to the first molares of the left side of lower jaw. It had a nobbed surface, was of a dark purple colour, and adhered firmly to the alveoli by an extended base.

I removed this excrescence, and cut it away closely to the bone. Soon afterwards it grew again; when, besides removing the fleshy mass, a portion of the subjacent bone was taken away with a trephine. The tumour grew a third time; and dreading its progressive increase, I contemplated, as the most certain means of curing this disease, the removal of a considerable portion of the jaw.

Mr. George Young was consulted on this point. He related to me an instance of a large tumour of the same description growing from the antrum, which, after having been unsuccessfully removed with the knife, he completely eradicated by producing an exfoliation of the bone from whence it grew, by the repeated application of *kali purum*. This rational practice, and Mr. Young's ingenious mode of managing it, were immediately adopted in the case of the present youth, and with the most perfect success.

After dissecting away the tumour, the kali was rubbed over the raw surface of its base. The adjacent sound parts being carefully protected with dossils of lint, the kali was repeatedly applied to the surface, which was again and again cleared by rubbing off the dead portions after each application of the kali. This process, which occupied a considerable time, was daily repeated. Finally, the bone was laid completely bare, and in a few weeks a bone exfoliated, consisting of a thin lamella of considerable breadth.

The vacuity which remained, and which was large, from three of the teeth having been removed, rapidly granulated and cicatrized, and when I saw this patient a few years afterwards, I was astonished to find that the contiguous teeth had coalesced, filling up the deficiency in the jaw in a most extraordinary manner.

Case 2.—A gentleman, forty-five years of age, had a tumour of the upper maxilla, which completely filled up the space between the four incisores and lip, and was so large as to elevate the lip and deform the countenance. It was of a dark purple colour, had a firm fleshy feel, and adhered immoveably by a broad base to the subjacent bone.

I dissected back the lip, to expose the whole tumour, and then removed all that portion which the knife could reach, and afterwards freely rubbed the *kali purum* on the raw surface. The application of the kali was repeated every day for some time, and subsequently every other day. Ultimately the alveolar processes were completely exposed, and exfoliating portions of the thin external laminæ daily separated,

so that in a few weeks the whole dead bone had exfoliated, and the surface which it exposed was afterwards speedily covered with granulations, which cicatrized, and left little deformity.

Remarks.—These cases will suffice to show the advantages to be derived from this mode of treatment, for it is evident that by the knife alone it is impossible to destroy such tumours, as they grow in situations where it is often not practicable to saw off, or otherwise remove, the diseased portions of the bone from which they grow. Nor can the actual cautery answer the intended purpose, unless by such frequent repetitions of a painful operation as few would allow.

The common lunar caustic is quite useless in such cases; as the length of time occupied by the formation and separation of an eschar renders it too inert a remedy, the growth of the tumour being more rapid than the destruction effected by the caustic, whereas the kali purum possesses all the advantages of the actual cautery in the rapidity of its action, and of the lunar caustic in the nicety of its application. The kali destroys the life even of skin, almost as quickly as the cautery, so that slough after slough may be produced, and a large portion of the diseased growth thus daily destroyed. Besides, it has the advantage of being applied with great precision to any particular part, by which only the diseased portion is destroyed, and the necessary quantity of bone denuded. With regard to the pain produced, this mode is decidedly preferable. The application of the kali on the tumour produces but slight uneasiness, and I have been surprised how little a patient complains, unless it touch the sound and healthy parts.

I think it also extremely probable, that this practice may be beneficially adopted for the removal of tumours in other parts of the body, which are attached to bones, or for the removal of diseased bones themselves.

Case 3.—A lady had for many years a small abscess on the heel, at the bottom of which Mr. Young could feel, with a probe, a piece of carious bone. In place of resorting to a severe operation with the knife, he enlarged the sinus with the kali, and then applied it to the carious portion of the os calcis, which soon exfoliated, and the patient completely recovered.

Emetics of Salt and Water in Cholera.

With a view of still further confirming the valuable observations of Mr. Beaman on the use of salt-and-water emetics in the treatment of cholera, I am persuaded that the following abstract of a communication made to me by Mr. Bird will be read with interest:—

"In the month of November, 1832, cholera raged with very considerable violence at the Dowlais Iron Works, near Merthyr Tidvil, in Wales. Upwards of four hundred individuals suffered from this frightful disease, a large proportion of whom came under my own observation. Though different modes of treatment were tried, the most decided benefit resulted from *salt emetics*, the more especially when administered during the earlier stages of the disease,—the most striking advantages being derived from the use of calomel in the latter stages; these advantages being the more certain whenever the exhibition of the calomel had been preceded by the use of the salt emetics.

"The *calomel* was always very largely administered, ten grains being the usual dose, which was repeated every hour until the symptoms yielded. In one severe case of the disease, ten grains were at first given every quarter of an hour, and repeated afterwards at such intervals, that the whole quantity taken by this patient in twenty-four hours amounted to no less than two hundred and forty grains; and it is worthy of remark, that he recovered without having any of the usual effects which mercury produces on the constitution.

"259, Oxford-street, August 31st, 1834."

Lancet Sept. 1834.

DEFORMITY OF TWELVE YEARS' DURATION, SUCCEEDING A BURN OF THE ARM AND FOREARM, REMOVED BY AN OPERATION.

To the Editor of The Lancet

Sir,—Believing that the following case will be considered worthy of a place in your journal, I shall feel obliged by its early insertion. I am, Sir,

Your obedient servant,

HAMILTON ALDER ROBERTS.

Bangor, North Wales,
August 29, 1834.

Case.—David Williams, ætat. 15, consulted me in September, 1833. His parents informed me that he had been severely burnt in consequence of his clothes taking fire while a child of between two and three years of age. He had been placed under the care of some old woman.

I found the right arm and forearm closely drawn together, so as to form a very acute angle at the elbow. A thin but deep bridle of integument connected the arm and forearm, extending from the lower part of the superior third of the arm, to within two inches of the wrist. The up-

per border of this ridge was rounded, thick, and of an almost cartilaginous hardness, being about an inch and a half in length. Both the arm and the forearm were almost entirely covered by a large cicatrix. The thumb remained firmly flexed.

It is well known that the majority of surgeons are of opinion that a deformity of this nature cannot be removed unless the whole of the cicatrix be excised, and that a simple division of the bridle would be followed by a cicatrix, which would again contract when the wound has healed up. Baron Dupuytren, however, asserts that a mere division of the cicatrix will in many instances succeed, particularly if a proper apparatus for securing continued extension be employed until the tissue of the new formation has acquired its definitive organization. He advises that no operation be attempted until after the lapse of some months, or even years, after the formation of a cicatrix, for this important reason,—that when the cicatrices have acquired all their solidity, when the ridges or bridles are definitive, completely organized, they lose that extraordinary force of retraction which is so peculiar to the recent cicatrices of burns, and acquire a retractility little differing from that possessed by all the natural tissues. Baron Dupuytren has related, in his "Leçons Orales de Clinique Chirurgicale," the history of two cases in which division of the cicatrices terminated successfully. The first was that of a retraction of the fingers of eighteen months' duration. At the expiration of four months the parts had acquired their natural dispositions and motions. The second example occurred in a child aged ten years who had been burnt eight years previously. A bridle of integument confined the left hand in such a manner as to form with the forearm a right angle. This bridle was divided in three places, and continued extension was employed; at the end of two months and a half the patient had perfect use of the hand.

Supported by the authority of so distinguished a surgeon, I determined upon having recourse to a similar operation, which I performed in the presence of several medical friends on the 5th of October, 1833.

The projecting bridle of skin was divided by a straight bistoury down to the bend of the arm. This first incision being insufficient to allow of the required degree of extension, two other incisions were made on each side, as far as the condyles of the humerus. The thick and horny substance which remained on the upper part of the arm, was afterwards excised. The wound being lightly dressed with lint, &c., the parts yielded, but in a very slight degree, to extension. All violent attempts were avoided, as it was to be expected that the rigidity of the muscles, &c., would prevent any immediate change of the parts. A splint and bandages were next applied.

October 6. Patient has slept well, and does not appear to have suffered much. The parts have yielded a little more.

12. The distance from the acromion to the carpo-metacarpal articulation measures eleven inches. The splint, giving the patient some pain, was removed, and extension was maintained in another way; a broad roller was passed under the axilla so as to keep the scapula fixed, and was secured to one side of the bed. A smaller roller, fastened to the wrist, had its ends tied to a pillar at the foot of the bed, by which simple contrivance the requisite degree of extension was continued without creating much uneasiness to the patient.

22. The distance from the acromion to the wrist is now thirteen inches and a half.

31. Distance from the same points is increased to fifteen inches and a half.

Extension was persevered in up to the 3rd of April 1834, at which time the wound healed. The boy has, at the present time, a very free use of the arm (which is of the same length as its fellow), and has for the last three or four months been employed in working at the slate quarries.

The thumb, which before the operation continued strongly flexed, can now be extended and readily moved.—*Lancet Sept.* 1834.

ADMINISTRATION OF EMETICS OF COMMON SALT IN CHOLERA.

To the Editor of The Lancet.

Sir,—You will perhaps be able to find room for the following case:—

On Wednesday last I visited Mrs. E., who had been labouring under a neglected diarrhœa for six days, no medical advice having been procured. I found her vomiting most violently, and almost incessantly; the pulse scarcely to be felt, except just after retching; the legs and arms cold and livid; severe cramps; face collapsed; and labouring under the ordinary symptoms of asphyxial cholera. She had been taking a stimulant mixture, and nearly a pint of brandy, in the night and day preceding my visit.

I recommended an enema, containing 15 minims of *Tinct. Opii*, in a pint of warm water; and, on suggesting to the medical gentleman in attendance with me the common salt emetic, he remarked, that if vomiting were likely to do good, there had been during the day, quite enough of it, and that it still was very violent; but on my representing that, as vomiting is well known to increase powerfully the action of the absorbents, there was a chance of some of the

salt being absorbed, he concurred. Six table spoonfuls were sent in solution : half was given directly, with but slight effect as to reaction ; the second dose was given about an hour and a quarter afterwards

In the morning she was found to be in a better state. Vomiting had ceased, as also had the cramps, soon after the injection. About 11 A. M. I thought collapse was again coming on ; but towards evening our patient rallied, and the circulation became fully re-established.

The soda and lemon-juice, as directed by Mr. Beaman, seemed to excite nausea, and she refused to continue taking it. Slightly nourishing broth, with very little brandy in it (half a tea-spoonful), was given, in small quantities.

Although stimuli had been freely employed before I saw her, I am disposed, from her state of collapse when I saw her, and from having seen the complete failure of every kind of stimulus in 1832, to attribute much to the exhibition of the common salt : and I send the relation of the case to you, as very encouraging to further trials.

I would beg to recommend, when the cramps are severe, the injection, *per anum*, of about 15 or 20 minims of *Tinct. Opii*, in 0j of warm water. Sudden and complete relief has usually ensued ; and the second enema has commonly removed them altogether, to the great relief of the sufferer.

During the premonitory diarrhœa, my practice has been to stop it altogether, by means of the cretaceous mixture, with a little opium where there are cramps ; in other cases without it ; and my success has been invariable. I have never, after the two first cases I attended, given calomel at such a stage of the complaint.

In conclusion, I must add, that my patient was threatened with the ordinary consecutive fever ; but the symptoms are now so far subdued as to warrant a confident anticipation that she will soon be restored to health.

I am, Sir, your most obedient,
J. J. FURNIVALL, M. D.

Hertford, Sept. 1, 1834.

Lancet, Sept. 1834.]

CURE OF CHOLERA WITH SALT EMETICS.

To the Editor of The Lancet.

Sir,—In The Lancet for August 23rd, you invite medical men to communicate the results of their experience in the use of emetics of common salt in spasmodic cholera. The following rough notes of a case are at your service.

I am Sir, yours, &c.
TIMOTHY POLLOCK, M.R.C.S.

4, Gray's Inn Lane, Sept. 2, 1834.

Case.—August 29, 1834. Benj. Stroud, of the *Horse-and-Groom* Yard, Holborn, was seized with the usual symptoms of spasmodic cholera, having suffered for several days previously from diarrhœa.—(The enumeration of symptoms we omit.—ED. L.—) Let him have three table-spoonfuls of common house salt in half a pint of water immediately, and repeat the dose in twenty minutes should the cramps continue. Apply a mustard poultice over the stomach. Give an effervescing draught every hour, and iced water for common drink.

30th, 10 A. M. The salt produced smart vomiting as soon as swallowed. General appearance much improved ; no return of the cramps ; hands and surface generally much warmer ; bowels much relaxed ; vomiting troublesome during the night ; pulse slower and fuller ; tongue nearly clean. Continue the effervescing draughts 8 P. M. The bowels still continue relaxed, but the evacuations are feculent. No vomiting.

31st. No complaint but of diarrhœa and weakness.

Sept. 1st. Out walking.

Lancet, Sept. 1834.]

EFFICACY OF VACCINATION AGAINST THE WHOOPING-COUGH.

Jumer had already pointed out the efficacy of vaccination in mitigating, if not preventing, the extension of whooping-cough. The Italian physicians have lately made some experiments on this subject which deserve to be repeated on a more extensive scale.

M. GRIVA, since director of vaccination at Turin, in a memoir on variola (*il severino*), says, that several cases of whooping-cough which have been much mitigated by vaccination, are reported by Drs. FERRARI and AMBROFUS. During the course of the varicella the spasmodic cough gave place to a simple cough of slight bronchitis, and in some instances the disease was very manifestly abridged. During an epidemic of whooping-cough, Dr. BOCCARDI also employed vaccination on very young children, and found that the mortality previously caused by the disease was immediately arrested ; the cough assumed a milder character, and was in most cases limited to three or four weeks, whereas its ordinary duration is more than forty days. Several similar facts have been witnessed and reported by Drs. ORLANDI, MATTURA, FABLERONE, &c.—*Lancet, Sept.* 1834.

CASES OF MALIGNANT CHOLERA SUCCESSFULLY TREATED WITH EMETICS OF COMMON SALT.

By ISAIAH BURROWS, *Surgeon to the Devonport and Stonehouse Public Dispensary and Eye Infirmary, and late Surgeon to the Cholera Hospital, Stonehouse.*

The perusal of a letter from Mr. Beaman on the treatment of Malignant Cholera with the chloride of soda, has afforded me infinite satisfaction, as corroborative of the views I have for a long period entertained respecting this highly important and direful malady, and now establishing the opinion I have expressed to my immediate medical friends, that it was the only remedy the administration of which could really be justified.

The reasons which led me to employ it are the following:—During the period in which I held the office of surgeon to the Cholera Hospital at Stonehouse, in 1832, I experienced many conflicting feelings on witnessing the recovery of numerous cases of Cholera without the use of any internal remedy, and others, again, in which the patients died, notwithstanding the use of every plan that had been submitted to the profession, and thus, after passing through this perilous duty in safety, my mind was a perfect chaos, and I could not resolve upon any plan of treatment with satisfaction or confidence. When, then, a few cases appeared in the autumn of last year, I was almost in despair, and being thus led to review the notes I had made of my treatment on its first visit, I found this important fact presenting itself,—that in *every case that recovered* I had employed *common salt*, avowedly, it is true, as an *emetic*. In many instances it did not act in this way, and when retained was much more beneficial to the patient. This circumstance suggested its employment in the three following cases:—

Case 1.—11th Oct. 1833.—Mr. A——, ætat, 56, of intemperate habits, having experienced severe vomiting and purging, sent for his medical attendant, who found him extremely frightened and weak, and his voice reduced to a whisper. Emetics were administered, followed by large doses of calomel, in conjunction with other remedies, but without avail. He was also bled. The symptoms advanced with rapidity, and at 9 P. M. the pulse was not to be felt at the wrist. I was then requested to attend, having found that very prompt treatment had been employed. I related the above circumstance, and we accordingly administered two table spoonfuls of salt, dissolved in a pint of lukewarm water, this the patient greedily swallowed, and retained the whole for twenty minutes, when he vomited a little, and discharged about a tea cupful. A change quite unexpected followed; there was a return of circulation to the wrist, his countenance brightened, the skin and tongue became warm, his voice more audible, and at the end of three-quarters of an hour, only one discharge had taken place, small in quantity and of a dark colour. Reaction was established to the entire satisfaction of his medical man and a decided improvement was manifest to the friend, and to the patient himself. Calomel and diaphoretics were persevered in during the night. At our visit on the following morning, we found that frequent bilious discharges had taken place from the bowels, and he had passed a little urine. Mercurial action was by this time set up. He continued in a favourable state during the day, and took broth frequently. On visiting him in the evening my astonishment was great on finding that he had suddenly relapsed into as bad a condition as on my first visit, and he died comatose that night.

Case 2.—The same evening on which this patient, whose case I have given above, died, I was requested by a marine, since deceased, to visit his wife, living in George Street, named Trethewy, æt. 22, attended by the assistant-surgeon, under whose care she had been the whole day. He had administered to her effervescing draughts and calomel, and as instantly were they rejected, and from the opinion he had given that she would die, the friends sent for me, regardless of his displeasure. I found her in the condition so often described, and as the malady could not be mistaken, the symptoms need not be related. Having but the day before seen the good effects from the salt and water, I dissolved two table-spoonfuls in a pint of lukewarm water, which I administered to her in two portions. The first dose was immediately rejected. She then drank the other without a moment's delay, and this was retained. Before, however, I gave her any, she refused to take it, in consequence of the violent vomiting that was excited whenever she attempted to swallow, but to her husband's joy it afforded a relief quite unexpected. I remained with her one hour, and while there she had no return of the vomiting, and passed only one small evacuation; her countenance changed from the ghastly hue, which is so characteristic of the disease, to its natural colour. The pulse beat distinctly at the wrist, and the whole surface of the body was warm. I then directed that a small quantity of tea should be given, as the thirst had rather increased than diminished. This sensation, however, was different. The request made for cold

water is generally expressed for the purpose of allaying the sensations of heat and oppression at the precordia, but now it was needed merely to moisten the mouth and fauces. Having obtained for her fresh blankets, and applied external heat, she was considerably better. I replenished the jug with salt and water in the same proportions, and desired that a *wine-glassful* should be given to her every hour. This was punctually attended to, and, I found, even wished for by the patient oftener, from the relief it afforded. At 6 A. M. the following morning she was visited by her medical attendant, and the delight he felt was expressed, in no measured terms, to the husband and friends. I saw her at 9 A. M., and found complete reaction, almost amounting to fever; bilious discharges and urine had been passed. Not till this visit was I aware that her medical man had not been informed of my attendance, although it was upon a contrary condition alone that I consented to see her; however, I must have the testimony of that gentleman himself, that the case was a most severe one, and that up to the last moment he saw her it had proceeded uncontrolled, notwithstanding his judicious measures. She experienced many fluctuations in consequence of the illness of her husband. She was afterwards bled and other remedies were employed to allay the feverish symptoms, and eventually she recovered.

This case was reported to the commandant of marines, and her husband was not permitted to enter the barracks, but remained with her, and acted as her nurse. Two days after, the poor fellow showed symptoms of the disease. His anxiety for his wife's safety was very great; he had attended her assiduously in a small close room, which, together with the fear of his medical officer's displeasure, altogether increased the symptoms. He was immediately admitted into the Royal Naval Hospital, where he died of maligant cholera.

Case 3.—On the 9th of November I was called upon to visit a young man named Horswill, æt. 19, dissipated in his habits and dirty in person, who had been at the fair in Plymouth on the Wednesday evening previous, and had drunk of different kinds of spirits. The following day he had several loose evacuations, which in the course of the night increased rapidly, attended with violent cramps, and on the 11th, he could not move without perfect exhaustion. Notwithstanding the urgency of the symptoms the friends did not send until 2 P.M., when the disease was completely developed, and it was apparent to them that he was suffering from cholera, having seen some of his own friends die of this disease. Here was another case fairly developed, and it gave me a full opportunity of trying the chloride of soda. I need not recapitulate the plan I pursued, as it was precisely similar to that employed in the last case, and attended with like results. At the end of a fortnight he was quite well and walking.

Not considering, however, that these cases alone would be sufficient to confirm its use, and none others coming under my notice, the disease not being general in the town, I have never given them publicity, more particularly as the salt was universally known as a remedy, or rather as an efficient emetic. With regard to the *modus operandi* of the salt, I cannot for a moment believe that the vomiting is its only effect; for if we examine the cases above detailed, it will be found that the solution *was retained* by the stomach, and the more frequently it was repeated, the more apparent and permanent was its *influence*. From Mr. Beaman's own statement it will be seen, that unless it be followed up, and the solution is quickly repeated, a relapse ensues, and thus far we agree, as may be seen by referring to the first case. I think, Sir, that the communication of Mr. B. is one of the most important that has been laid before the profession, and it affords me much pleasure to confirm his statement, and adding my testimony to a free use of this valuable remedy.

Fearing, however, to extend this letter to an undue length, I will merely state my view of the way in which it acts, and the reasons which induced me to prescribe it in the manner mentioned in the last two cases; and first, I did so from the simple and plain fact that common salt being mixed with black blood immediately changes it from black to red. Secondly, because in the analysis of the blood which is found in the veins of persons dying from cholera, an absence of those constituents appears which are necessary to health and to produce secretions; and, thirdly, because in the evacuations which come from the stomach and bowels, a very large proportion of the essential salts of the blood is found, and among them is chloride of soda in a large quantity: consequently, if this be true, I ask, will the effort of vomiting alone impart to the whole mass of blood such a change as that which is seen to take place after the use of common salt? If vomiting alone has such an influence, we possess equally powerful emetics as this.

The principle of its action, then, I contend to be as follows: On the introduction of solution of common salt into the stomach, its first and immediate effect is, that of an astringent. It then becomes absorbed, and immediate combination with the blood in the veins of the mesentery follows.

This is now rendered fluid, passes on to the liver through the veins, assists in the formation of bile, which is now freely secreted, and passing into the stomach is either thrown off by that viscus, or going into the intestines is there discharged, after passing through the liver. If it be not expended there, it is then conveyed by the vena cava to the right side of the heart, combining with its contents, then passing through the heart and lungs, and thence affecting the circulation, and causing the alteration which is so visible after its employment, until its influence is lost in the general mass. Continue then to supply the system at regular intervals with this fluid; until the secretion of urine and the other functions are established, and the patient is rendered capable of receiving nourishment, which is soon felt, and you can with safety discontinue it.

Whether these ideas be correct or not, such are the effects following the use of this salt (if *any follow at all*), and I contend that it is not unreasonable to employ a remedy, which though it do induce an action, not altogether natural, yet if it be capable of giving to the blood a change nearly allied to the condition of health, gains for us an important advantage, and prepares the system for the reception of remedies to perfect the cure.

Thus, then, whether a trial be given to it in the way now proposed, I hesitate not to affirm, that it is the only remedy that has my confidence, or that I would allow to be employed, if unfortunately attacked with cholera myself. If, however, the facts which Mr. B. has brought forward, or the points which I have advanced, require further proof than the mere trial before any and every member of the profession, I confess my inability to produce conviction. Sophistry or argument alone I shall not have recourse to on the present occasion, but simply keep in view this grand axiom, that Medicine is a science of observation,—one that can only be perfected and raised beyond the suspicion of empiricism, by following the dictates of nature, and the evidence of our senses, discarding all theory unless borne out by reason, pathology, and facts.

Emma-place, Stonehouse,
Sept. 1, 1834.

Lancet, Sept. 1834.

INSTRUMENT FOR MEASURING THE PULSE.

At the meeting of the French Academy of Sciences on the 1st inst, M. MAGENDIE read a report on an instrument invented by a DR. HERISSON, called the "sphygmometer," and intended to measure the state of the pulse. As we intend in an early number to give a description of this useful invention, from the pen of its author, we shall merely say at present that the sphygmometer is composed of a small tube, containing a certain quantity of mercury, as in a thermometer, closed at the bottom by a portion of fine membrane (*a baudrouche*), and graduated to 80 degrees. Its application, like the construction, is excessively simple. The bottom of the instrument is placed over the radial artery, each pulsation of which elevates the mercury, and thus discloses to the eye the minutest variations of the circulation. It is unnecessary to dwell on the importance of a discovery (if such it may be termed) by which the indications of the pulse are not only subjected to the vision, but are measured with the utmost exactitude, and may be so recorded for the information of others. In this respect the sphygmometer has an infinite advantage over the stethoscope, the only instrument parallel to it in object and character.—*Lancet, Sept.* 1834.

THE INDIA JOURNAL OF MEDICAL SCIENCE.

CALCUTTA, APRIL 1, 1835.

In MR. WRAY'S case, the first disease, Hepatitis, was treated with the skill which we should expect from a gentleman of his professional acquirements. The case of the unfortunate patient is curious, in as much as the inflammation of the brain which ended in abscess, almost seems to have been a metastasis from the liver. Of course no treatment could here avail in a disease of so formidable a nature when fully established, and no opportunity presented for the employment of preventive means. In this theoretical view (which we throw out at random for the consideration of our professional readers, and upon which we should like to have the results of any experience of which they may be possessed) Mr. WRAY'S case may be exceedingly valuable in this country, where cerebral affections so frequently seem to have connection with disease in some remote organ; and perhaps lead to investigation as to the nature of, and the discovery of means to avert, so serious a calamity.

Accompanying Mr. Brett's communication was a drawing of the operation described in his first case, which was mislaid till too late to admit of its being got ready to appear. This, however, is the less to be regretted as the whole process is described so well by Mr. Brett, as to need no aid from pictorial design.

Mr. Brett's table, of 49 cases of operative surgery, is valuable, as shewing the great good that may be done by an individual of energy and philanthropy, even amidst the difficulties of a march. It is evident, that if so many cases could be operated upon with such great success, under such adverse circumstances as were those treated by Mr. Brett in a space of time somewhat less than two months, incalculable benefit would be the result of one or two persons being employed as travelling oculists. The scheme has been, we believe, many times heretofore mooted, and the usefulness of the appointment acknowledged by a high authority in the state. Few things are more deserving the attention of a government, distinguished by its humanity to its people, than this, in a country, where blindness, and diseases of the eye are prevalent to a very great extent. It is needless to say any thing of the misery entailed upon an unfortunate individual afflicted with loss of sight, or of the gratitude due to the hand by which that loss is prevented, or the blessing of day restored. Mr. Brett must derive great satisfaction from contemplating the success of his useful labours.

The treatment of Hœmorrhoids by the Native doctors of Dacca is one which, however successful it may have proved, appears to us fraught with objection. It would be a desideratum to have a description of the process, and the cases it has been tried in from a professional hand. In the interim, it seems to us, that the remedy is far too violent and the risk of immediate danger, from its application, considerable, to say nothing of possible future inconvenience; such as stricture of the rectum, for instance, supervening. No writer of modern times, has treated of diseases of the lower part of the rectum with greater discrimination and plain sense—the result of large practical experience, than the celebrated Dupuytren; and some extracts from his works in former numbers of this journal, bearing on the matter at issue, may be referred to with advantage by readers having a personal interest in its discussion.

Among our Selections will be found a very important paper on the influence of odours on colours by Dr. Stark, if, on trial, the author's conjectures should be found correct; and some circumstances, that have come to our knowledge in the course of our professional career, lead us to think that perhaps they may. At home, typhus fevers are frequently said to have been caught at the funerals of persons, who have died of that disease. And we ourselves know of one very memorable instance, in which the brother of the deceased stepped but for a moment into the house of the widow, to speak a word of consolation to her in the hour of her distress. He was seized soon after with all the bad symptoms of typhus fever, and escaped with difficulty. At the time it was thought, that grief at the loss of a brother might have disposed the body for the operation upon it of infectious matter, that was innocous during the course of his brother's illness, whom he frequently saw when sick. But if Dr. Stark's theory is founded on truth, it may have been, that the infectious matter was more hastily absorbed than before by the black clothes in which, at that time, he was arrayed. At all events, the matter is one well worthy of consideration; and we doubt not will be duly investigated by our brethren both here and at home.

We are sorry to be again compelled to revert to the watering of the roads, and the state of the public drains. The plan we recommended in the seventh number of this journal is, we opine, the best that has been

yet offered for the consideration of the public. We proposed that if new sewers could not be constructed, a reservoir should be built in the highest part of the town, to be filled by means of the steam engine at Chandpaul Ghaut, or if that should be found insufficient, another erected in its help; and that the water from this reservoir should be so managed, as to occasionally wash out the drains, and by means of pipes and water plugs serve, both to extinguish fires, when needed, and water the roads. This plan is, we are convinced, the most economical, and the most efficient that can be adopted; and, when new sewers shall at some future time be made, it will be found to be the most complete. At all events, what is to be done should be done quickly. Even along the Esplanade, leading toward the Supreme Court, a mass of filth is sometimes to be seen, that would not be tolerated in the best parts of any city of equal wealth and importance in the world. This, besides being unsightly, is positively unwholesome; and we trust, that some effectual means will be taken to reform it ere long. While the dispute is carried on as to the trumpery matter of paying a Bheestie, the people die.

The Medical Periodicals have reached us for August and September last. The new facts they contain will be found among our Selections, but it may not also be uninteresting to our readers, if we give a general summary of the topics, which, at the latest date, agitated the profession at home.

Cholera has again appeared in London, and, more or less, in various other parts of the Kingdom. But greater success either attends the treatment of the disease, since the practitioners of Europe have condescended to profit by the experience of their brethren of the East, or the cases themselves are not so severe as at its first appearance: at all events, the mortality is less in proportion than before; and the state of alarm is nothing like what it was in 1832. The latter circumstance may perhaps have some effect in producing the former.

In the treatment of Cholera, emetics have now taken their turn of trial in England, as heretofore they were tried in India, and it would appear with the same good success. These medicines have been of various kinds; but common table salt and water, is at present the favourite; and is, by some, supposed to exert a *specific* effect over the disease. Among the advocates of the emetic plan we observe Mr. Wardrop, a gentleman, of whose sound pathological views our readers have had so many opportunies of judging in the pages of this Journal. A Mr. Cotter of Lisson Grove has tried a mixture of the wine of the seeds of Colchicum, Epsom salts, and Infusion of Roses, in cholera; and as he states, with great success. Mr. Baylie of St. John's Square relies upon effervescing draughts, with Tincture of Catechu and Laudanum. Dr. W. Reid Clanney intends to throw a supply of artificial serum, with a suitable proportion of air (! ! !) into the veins. Calomel in small and frequent doses has been given with success: and Phosphorus has not failed in the West to run its bright career, with better success, as it would appear from the report of Mr. W. Batten of Southwark, than attended its administration in the East. In short, the practitioners at home have found out what we discovered long ago, *that there is nothing that will not cure cholera, and unhappily nothing that will.*

Of the above remedies, Dr. Clanney's seems to be a revival of the old story of Dr. Stephens in a different shape. The chemical physicians appear to forget, that every thing in nature has not only a chemical, but also a physical character: that the former may be imitated, but the latter rarely, perhaps never can. For instance:—Sulphate of Lime may be chemically formed in the Laboratory of the chemist as accurately as in the grand Laboratory of nature. The former may answer to every reagent that the latter does: and the chemical composition of the one cannot be found to differ from that of the other. And yet, when burnt and mixed with water, one will not set so well as the other does: and this because, though agreeing in

chemical, they differ in their physical characters In like manner, the Diamond and Charcoal are chemically the same; though physically, they literally differ as darkness differs from light: Dr. Clanney may therefore make his artificial serum; but unless he can manage to give it the physical as well as the chemical properties of the true, in fact unless he can make serum itself, we will answer for his lamentably failing. The artificial serum will be enough without the atmospheric air: but we would advise him, before he attempts the latter, to see its effects at the Veterinary College in the veins of a horse.—The mischievous doctrine, of the contagiousness of cholera, appears to be now as much out of favour in Europe as it has long been here.

The "*concours*" for the election of a Professor of Surgery at Paris has closed; and M. Velpeau has succeeded to the venerable Baron Boyer. The appointment has given general satisfaction, as M. Velpeau was considered an ill used man, by the result against him of former similar trials. As might be expected, the contest was severe, when Lisfranc, Lepelletier, Sanson and others, the first Surgeons of Paris, were competitors of the fortunate candidate.

Upon this mode of electing a canditate for a medical appointment, much might be said. It has objections, no doubt, in the manner in which the thesis is allotted to each candidate; and the public disputation is, perhaps, rather too theatrical for English taste. And yet the utter prevention of all jobbing, with the certainty that the fortunate practitioner must be a man of talent and knowledge in his profession, makes us prefer it to the mode in which appointments are bestowed among ourselves; where the proceedings are generally so hole-and-corner, as to make the best jobber sure of success, whether qualified or not. Among ourselves the real modesty of merit, or consciousness of desert, for the most part, witholds the best qualified from condescending to cabal or intrigue. Whether, therefore, the concours of our lively neighbours be the best mode of proceeding or not we may doubt: but we can have no doubt of its being better than our own; or at all events of our own system being wonderfully improved by candidates for all medical situations, being invited to come forward by public advertisement; and by their declaration, on honour, at the time of election, that they have not either directly, or indirectly, in private, solicited for a single vote.

The county coroner's bill, owing to a disagreement between the Lords and Commons has died a natural death. The upper house insisted that the coroner should have the power, as at present is often done, of excluding from inquests all persons not officially engaged in the execution of its duties, or under examination. The lower house would not limit the publicity of inquests. The bill was, therefore, voted to be considered by the House of Commons, on that day three months.

When it is known, that one of the clauses, of this iniquitous bill, required the attendance of medical witnesses, at a post mortem examination, without being paid more than 1 £ for their time or labour, however great the expence of the one, or of the other, or of both might be; little regret can be felt at its having terminated in this manner. Our profession has thus escaped, for a time at least, one of those acts of public injustice that are daily tending to degrade it to the rank of the Surgeon-Barber.

The London University Charter Petition has also been rejected. Our opinions upon this matter have before been freely expressed, and all we have since heard of it, has confirmed them. What the expence of this act of folly may have been to the University we know not; the legal expences attending but one memorial alone against it, that of the lecturers at the various hospitals in London, cost more than £440 We trust that the University, made wiser by this rebuff, will in future recollect, that something more than a name is necessary to constitute College, and something more

solid than the title of Professor, is requisite to make a diploma of value.

Unlike the London University, the Medico-Chirurgical Society has succeeded in its object of obtaining a charter of incorporation—a measure which every one must rejoice at, who knows the very great merits of that Society, and who is conversant with its volumes of transactions; the very best beyond all comparison, that have ever been published by any Medical Society in the world;—a matter indeed not to be wondered at, when we consider, that the most distinguished members of the profession have belonged to it for a series of years.

The Medical Committee of the House of Commons has terminated its labours, so far as the collection of facts, and taking of depositions are concerned. Mr. Warburton, the Chairman, has now to draw up a report upon the whole; and we doubt not, that the zeal and ability, of that gentleman, will enable him to recommend some plan of general benefit to the profession.

Of the necessity of some reform all parties seem to be convinced. During a period of upwards of sixty years not one Licentiate of the College of Physicians was elected into the College on the proposal of a Fellow, though a statute was enacted sometime about 1765, authorizing Fellows to propose Licentiates for election into the order of candidates: and only seven admitted in 14 years into the body of the College, under the statute which allows the President, as a matter of favour, to propose them. Dr. Pearson died before his election could take place, as it is said, of the mental exertion, necessary to enable him to undergo a scrutiny in classical and elementary knowledge. Classical and elementary knowledge, for a man had been a successful practitioner and teacher of medicine, and its collateral sciences, for the greater part of a long life! Dr. Wells was not elected on account of a quibble upon a point of form; and Dr. Wilson Phillip was for a whole year deprived of the honour he sought for, because though, as the President admitted, Dr. Phillip was as well known, for his discoveries one year as another, "there was" in the words of Sir H. Halford, "a controversy going on at the time with an eminent person, with whom he was engaged; and, perhaps, it was better to let that be determined before he was proposed!" We are not enough in the Counsels of the College to know why it was better to wait, but as Sir H. Halford said so, we suppose it was. One thing however we do know, and that is, that the sooner some fixed impartial principles are formed, for the free admission to public institutions of all qualified persons, the better.

This brings us to the College of Surgeons, which body has thought proper to issue another of those regulations concerning the branches of Medical Science which they think ought to be studied, that have brought so much odium upon its counsels. The regulation we published in our last number; and we only revert to it here to enquire, if it ever occurred to the Council, that the only way in which it has legally the power to interfere is, to lay down rules for their own conduct. The Council have a right to say to a student "we consider a knowledge of such and such branches of science necessary to make a good surgeon, and therefore upon them we will examine you;" but they have no right to say to him "you shall acquire that knowledge in such and such places, and in such and such a time, and in such and such a manner" Let the examiners be strict as to the quantity of knowledge possessed by the examined, and not as to the where, when, or how, he got it.

The Island of Jamaica has taken the lead, be it for good or for evil, in medical reform. An act has been passed for the establishment of a College of Physicians and Surgeons, and all who enrol themselves as Fellows, are placed upon the same footing, whether they are physicians, surgeons, general practitioners, or apothecaries, there being no difference of rank. The act is said to hold out a great inducement to young men to enter the profession.

We regret to observe, that the late Director General of the army has become unpopular with the profession. He is said to have taken advantage of his situation to make requests to people, to whom his requests were laws, to subscribe to public Libraries, Societies, and Museums; and to send in reports upon any thing that might occur in their Hospital practice. We have heard a story of one gentleman, when in the Peninsula, being called upon by the Director General for a report upon a particular disease. The person applied to, however, flatly refused to comply with the request, tating that it was unusual, and that he could not be called upon, legally, for any documents, but the periodical reports of all Hospitals in H. M's. service. Sir James desisted, and the officer upon whom the demand had been made, shewed that his refusal was not to be attributed to ignorance, by writing a standard work upon the very matter in dispute. It is to be wished that things of this kind had never been mooted, for Sir James Macgregor is a man, who upon very important points has deserved well of the profession.

The question of chemically ascertaining the presence of miasmatous matter in the air, has lately engaged the attention of the Royal Academy of Science at Paris. M. Magendie not long ago asserted "that the presence of a highly putrid animal matter could be established in the atmosphere surrounding the bed of a patient labouring under hospital or yellow fever, by the application of cold." And M. Boussingault read a paper before the Academy on the 4th August last, "on the possibility of proving the existence of miasmata, and an hydrogenated principle in the air." M. Boussingault states that from many facts "it is concluded that vegetable matter being decomposed, under the influence of heat and moisture, produces miasmata; and also, that the unhealthy air is more heavy than the healthy; and finally, that it is deposited with the dew which falls abundantly in warm countries." Moscati guided by these data condensed the dew about the rivers of Tuscany, and collected water, which at first was limpid, but soon deposited flocci presenting the characters of animalized matter.

In 1812, M. Rigaud de Lille made analogous experiments in the marshes of Longuedoc; and obtained a liquid, which putrified very readily, containing flocci of matter having nitrogen for its base, and gave with nitrate of silver a precipitate, which passed quickly to a purple colour.

In 1819, M. Boussingault remarked, that sulphuric acid, placed in the neighbourhood of a marsh, became quickly black; while at a little distance the change of colour was very slow. At this period fever was very prevalent; and it struck him, that the change of colour in the acid depended upon the same cause, the presence of organic matter in the air. In 1829 he resided at Carthage, and performed several experiments by condensing the dew arising from a marsh, in a watch glass, to which was added a drop of sulphuric acid; when on evaporation a trace of carbonized matter was always found. These experiments prove the presence of organic matter in the dew; and to ascertain the quantity of this matter by the hydrogen it contained, he passed a given weight of miasmatous air, well dried, through a glass tube, heated red; when it entered into combustion, and formed an ascertainable quantity of water. The importance of this subject will be apparent when we remember, that during the prevalence of cholera in London, Dr. Prout is said to have observed, that the atmosphere weighed more than it ought to have done; and that by following it up the healthiness, or the reverse, of stations may be ascertained. The subject thus becomes of the first practical importance, and in this country particularly so, by preventing the formation of stations, and the building of houses upon spots, the air of which is thus previously found to be impregnated with unwholesome matter. It is not at all impossible, that had proper experiments been performed during the Garden Reach panic of 1833, much of the alarm and

the depreciation of property, that then took place, might have been spared; or at all events the emigration of the inhabitants of that suburb to a healthy place, would have been secured.

The Aldergate-street Dispensary question has been brought before the public again, by the resignation of the office of Physician, by Dr. John Whitsed. This person, it may be remembered, was the first who offered his services in that post, after the high minded medical officers formerly attached to the institution, had found it degrading to themselves to continue in their situations. The alleged cause of the resignation of Dr. John Whitsed is, in his own words because; "I perceive from the increasing prosperity of the institution, that my duties as physician will, in consequence, be greater than the state of my health will allow me fully to discharge;" but conjectures have been hazarded of his being a disappointed man, of his not having reaped those advantages from his conduct that he was led to expect, while the indignation of his professional brethren has been more than he could bear. There may be something in this; but at a distance from the scene of action we can hardly judge; though the fact, of this gentleman having come forward against the general opinion of the profession, to fill a situation Drs. Birkbeck and Clutterbuck could not hold for the reason given above, is prima facie evidence against him.

In a September number of the *Lancet* is a review of *Dr. Maunsell's Dublin Practice of Midwifery*, in which advantage is taken of the author's having stated in the commencement that "those who are conversant with the teaching of obstetric medicine, must have felt the difficulty of answering a question commonly put to them by students:—What book do you recommend me to take to the Lying-in-room?" to tell the following story—"A Colonel of Militia, who had suddenly been promoted from the Park to the field, was reviewing his regiment, for the first time, by the book of drill, not being "up" enough to the evolutions of human troops to do so from memory. Arriving at the bottom of page 6, he commanded the men to "shoulder arms." The order was obeyed. The Colonel promptly turned over leaf, and cried aloud, "unfix bayonets!" A pause ensued, and the exclamation was repeated. The pause, however, continued, when the orderly sergeant advanced from the ranks, and making the salute, softly informed the Colonel that the bayonets could not be unfixed while the arms were shouldered. "Ah!" said the Colonel, "I have turned over two leaves at once" and turning back to page 7, ordered the arms into a position more consistent with the proper train of manœuvres, and proceeded afresh. But the *pause* had an awkward effect. This story applies well to more things besides that to which the Lancet has applied it; though there are few matters in which "turning over two leaves" might more particularly play the devil, than in a case of difficult labour. Dr. Maunsell's book however, though affording this peg to hang the wit of the reviewer upon, is acknowledged to be a good one, "a useful epitome of the obstetric art."

The Goddess of Discord seems to have, as usual, flung her golden apple among the Governors and Surgeons of the London Hospitals, with a greater than usual degree of success: Hardly one is without its share of quarrels. Medical Journals do not appear to us, the best area in which to exhibit private or public bickerings, and we therefore only notice them to regret, that so much space is occupied in such matters, that might be filled up in a far better manner.

Lithotrity has achieved a triumph. By a note appended to the October number of the Medico-Chirurgical Review we perceive that:—"Mr. Castello has been successful, in communiting a stone of extraordinary dimensions, in his own institution. The calculus, when held in the instrument, measured three inches and a quarter in its long axis,

and two inches and three quarters in its smallest diameter. It was of fawncoloured lithate of ammonia and hard. It was computed that one third of the fragments was lost, as the patient collected only those which he voided during the night and morning—the rest of the day he generally spent walking about town. The portion collected was weighed at Savory's, Bond Street, and amounted to five ounces two drachms. If to this be added the weight of the third computed to be lost, we shall have a concretion weighing seven ounces, removed by lithotrity from a living man. This is certainly a splendid result. Mr. Castello stated, that had he not devised the double slide percussor, which has no limit to its grasping power, it would have been vain to attempt seizing such a mass by any other instrument. He ridiculed the idea of reducing not only this stone, but one of any considerable size and compactness by screw-force. The patient's age was sixty-four, and he had laboured under his complaint upwards of five and twenty years."

Upon this case we need only remark, that it is a most important one, as shewing that the largest stones can, contrary to a pretty general former belief, be dealt with as readily, or perhaps more so, by lithotrity, as by the dreadful, and we trust almost exploded, relic of a barbarous age, lithotomy.

MEDICAL INTELLIGENCE.

GENERAL ORDERS RELATING TO THE MEDICAL SERVICE.

GENERAL ORDERS BY HIS EXCELLENCY THE RIGHT HON'BLE THE GOVERNOR GENERAL OF INDIA IN COUNCIL.

2*d Feb.* 1835.—No. 29 of 1835.—The leave of absence granted to Surgeon John Tytler, of the Medical Department, in General Orders No. 8, of the 7th instant, to proceed to the Cape of Good Hope, is commuted to Furlough to Europe, on Medical Certificate.

11*th*—Assistant Surgeon Thomas Spens, M. D., to be Assistant Marine Surgeon, in succession to Assistant Surgeon Bramley.

Assistant Surgeon Henry Chapman to the Medical duties of the Governor General's Body Guard, vice Spens.

Assistant Surgeon Henry Hurry Goodeve M. D., to be Assistant to the Superintendent of the new Native Medical College.

Surgeon Henry Cooper, attached to the Civil Station of Barielly, has obtained, in the Judicial and Revenue Department, leave of absence for nine months, on Medical Certificate, from the 1st of March to the 30th November next.

16*th*. No. 40 of 1835.—The undermentioned Gentleman is admitted to the Service in conformity with his appointment by the Honorable the Court of Directors, as an Assistant Surgeon on this Establishment.

Mr. Richard Campbell McConnochie,—12th Feb. 1835.

19*th*.—Assistant Surgeon Alexander Muir McKenzie Minto, of the Medical Department, has returned to his duty on this Establishment, without prejudice to his rank, by permission of the Honorable the Court of Directors—Date of arrival at Fort William, 12th February, 1835.

His Lordship in Council is pleased to make the following Promotions in the Subordinate Medical Department:

Assistant Apothecary George Cooke to be Apothecary, Hospital Apprentice George Cockburn to be Assistant Apothecary, from the 27th January, 1835, in succession to Apothecary Hugh Carroll deceased.

No. 43 of 1835.—The following paragraphs of Military Letters from the Honorable the Court of Directors to the Governor of the Presidency of Fort William, are published for general information:

Letter No. 35, *dated* 3*d September*, 1834.

"Para. 2. The undermentioned Officer, belonging to your Establishment, has been permitted to remain six months longer in Europe:

Assistant Surgeon C. B. Handyside."

Letter No. 37, *dated* 10*th September*, 1834.

"2. The undermentioned Officer, belonging to your Establishment, has been permitted to remain in this Country, for the further periods stated against his respective name:

Surgeon J. F. Royle,—six months.

24*th*—*Letter No.* 41, *dated* 26*th September*, 1834.

2. We have granted to Surgeon James Hall, of your Establishment, an extension of leave for six months.

Letter No. 45, *dated* 8*th October*, 1834.

3. We have permitted the undermentioned Officer of your Establishment, to remain in this country for the further period stated against his name:

Assistant Surgeon B. C. Sully, four months.

The undermentioned Officer is placed at the disposal of the Hon'ble the Governor of Agra:

Assistant Surgeon Charles Newton, of the Medical Department.

24*th*.—Assistant Surgeon Archibald Campbell, M. D., attached to the Catmandhoo Residency, to Officiate as Assistant to the Resident at that Court.

25*th*.—Surgeon James Ranken, M. D., attached to the Civil Station of Delhi, for two months, from the 1st proximo, to visit Calcutta, on account of private affairs, in extension of the leave granted to him by the Commissioner of Delhi.

28*th*—No. 52 of 1835.—The undermentioned Gentleman is admitted to the Service, in conformity with his appointment by the Hon'ble the Court of Directors as an Assistant Surgeon on this Establihment.

Medical Department.

Mr. John Williams Knight,—Date of arrival at Fort William, 24th Feb. 1835.

Surgeon Robert Tytler, M. D., has returned to his duty on this Establishment, without prejudice to his rank, by permission of the Hon'ble the Court of Directors—date of arrival at Fort William, 24th February 1835.

GENERAL ORDERS BY THE RIGHT HONORABLE THE COMMANDER IN CHIEF.

30*th Jan.* 1835.—The Benares Division Order of the 20th instant, directing Assistant Surgeon C. J. Davidson, in Medical charge of the 4th Company 5th, to return to Dum-Dum with the 1st Company 1st Battalion Artillery, is confirmed.

3*d Feb.* 1835.—The Cawnpore Division Order of the 20th ultimo, directing Surgeon B. Bell, Officiating Medical Store-keeper, to relieve Assistant Surgeon A. Chalmers, M. D., from the Medical duties of the Civil station of Cawnpore, is confirmed.

4*th Feb.*—The Mhow Station Order of the 22d December, 1834, directing Apothecary J. Douglas to proceed towards Landour in Medical charge of Convalescents, is confirmed.

Apothecary Douglas will, on his arrival at Meerut, do duty under the orders of the Superintending Surgeon at that Station.

7*th.*—55th Regiment Native Infantry—Surgeon E. T. Harpur, from 1st February to 1st March, to remain at Hazareebaugh, on private affairs.

The Station Order of the 19th ultimo, by Lieutenant Colonel R. B. Jenkins, Commanding at Mhow, directing Assistant Surgeon E. J. Agnew, of the 6th Regiment Light Cavalry, to afford Medical aid to the 16th Native Infantry, during the absence, on leave, of Assistant Surgeon T. C. Elliot, is confirmed.

Assistant Surgeon M. McN. Rind, lately doing duty with the 65th Regiment Native Infantry, is directed to join and do duty with the Artillery at Mhow.

9*th.*—The Benares Division Order of the 31st ultimo, directing Assistant Surgeon T. Smith, M. D., to make over Medical charge of the Civil and Military Establishments at Mirzapore to Surgeon A. Wood, of the 25th Native Infantry, and rejoin his own Corps, the 8th Regiment Light Cavalry at Sultanpore, is confirmed.

The Order issued by Brigadier General R. Stevenson, C. B., Commanding the Force on Service in Rajwarra, under date the 19th ultimo, directing Assistant Surgeon J. Greig to proceed and join the 39th Regiment Native Infantry, to which he stands posted, making over Medical charge of the 32nd Native Infantry to Assistant Surgeon A. Keir, M. D., is confirmed.

Superintending Surgeon T. Tweedie (on leave of abscence) is posted to the Barrackpore Circle of Medical Superintendence, vice Thomas, who has embarked for Europe.

Surgeon D. Renton will continue to officiate as Superintending Surgeon at Barrackpore, until further orders.

Surgeon T. E. Baker, of the 10th Light Cavalry, will officiate as Superintending Surgeon at Agra, during the absence, on leave, of Superintending Surgeon W. A. Venour, or until further orders.

Assistant Surgeon W. B. O'Shaughnessy, M. D., on being relieved from his present charge, will join and do duty with the 10th Light Cavalry at Muttra.

11*th.*—The Cawnpore Division Order of the 15th October last, appointing Assistant Surgeon C. Pine, of His Majesty's 26th Regiment of Foot, to afford Medical aid to a Detachment of his Majesty's and the Honorable Company's Troops proceeding to Meerut, is confirmed.

Assistant Surgeon T. C. Hunter, at present with the Artillery at Dum-Dum, is appointed to do duty with His Majesty's 62d Regiment at Moulmein.

Mr. Hunter will report himself immediately to the Quarter Master General of the Army, who is requested to take measures for providing him with a passage to his destination.

Assistant Surgeon A. Drummond is appointed to the Medical charge of a Detachment of His Majesty's 49th Foot now under orders for Hazareebaugh, and is directed to report himself to the Brigade Major King's Troops in Fort William, from whom he will receive his instructions.

13*th.*—Hospital Apprentice Charles Simons now at the General Hospital, is appointed to act as Assistant Apothecary and Assistant Steward to a Detachment of His Majesty's 49th Foot, under orders of march from Fort William to Hazareebaugh.

Mr. Simons will immediately report himself to Assistant Surgeon Drummond, and he will return to the General Hospital on the arrival of the Detachment at its destination.

14*th.*—The Dinapore Division Order of the 6th instant, directing Assistant Steward James Parnell, arrived at that Station with a Detachment from Cherra Poonjee, to do duty in the Hospital of the European Regiment, is confirmed.

17*th.*—The Cawnpore Division Order of the 4th instant, by Brigadier General R. Stevenson, C. B., directing supernumerary Assistant Apothecary W. G. Carrison, doing duty with the 3d Battalion of Artillery, to proceed to the Presidency with Brigadier R. Patton, C. B., is confirmed.

18*th.*—The Order by Brigadier Genera R. Stevenson, C. B., under date the 20th ultimo, directing Assistant Surgeon J. Magrath, of the 3d Regiment Local Horse, to receive Medical charge of the Detachment of Sappers and Miners from Surgeon G. T. Urquhart and also to afford Medical aid to the Artillery Detail left at Patun, is confirmed.

19*th.*—Medical Department Assistant Surgeon W. B. Davies, (late Civil Gowahatty,)

for 3 months, from the date of his being relieved from his duties at Gowahatty, to visit the Presidency, on urgent private affairs.

20*th*.—Assistant Surgeon A. M. McK. Minto, of the 64th Regiment Native Infantry, recently returned from Furlough, is appointed to the Medical charge of a Detachment of His Majesty's Troops under orders to proceed to the Upper Provinces, and will report himself to the Major of Brigade, King's Troops, Fort William.

Assistant Surgeon J. Macdonell, who has arrived at Dum-Dum in Medical charge of the 2d Company 1st Battalion Artillery, will return to Dinapore, and place himself under the orders of the Superintending Surgeon at that Station.

23*d*.—The Division Order by Major General the Honorable J. Ramsay, Commanding the Meerut Division, of the 11th instant, directing Assistant Surgeon J. Murray, M. D., to proceed in Medical charge of the 3d Troop 2d Brigade Horse Artillery to Cawnpore, and Assistant Apothecary G. Bayley, attached to the Hospital of His Majesty's 11th Dragoons, to accompany the Troop as far as Cawnpore, and to do duty under the orders of Assistant Surgeon Murray, is confirmed.

Assistant Apothecary George Cockburn, lately promoted, is posted to His Majesty's 62d Regiment of Foot at Moulmein.

24*th*.—The Nusseerabad Station Order of the 5th instant, by Lieutenant Colonel J. F. Dundas, appointing Assistant Surgeon J. Duncan, M. D., of the 54th Regiment Native Infantry, to the Medical charge of the Artillery at that Station, is confirmed.

27*th*—The Station Order of the 15th instant, by Colonol G. Cooper, Commanding at Midnapore, appointing Assistant Surgeon R. B. Cumberland, of the 34th Regiment Native Infantry, to officiate as Civil Assistant Surgeon at that Station, in the room of Assistant Surgeon H. H. Goodeve, M. D., appointed Assistant to the Superintendent of the new Native Medical College, is confirmed.

28*th*.—The Allygurh Station Orders of the 13th instant, appointing Ensign and Adjutant W. W. Davidson, of the 32d Native Infantry, to act as Station Staff, Surgeon C. Mackinnon to the Medical charge of the 32d, and Assistant Surgeon A. Keir, M. D., to that of the Right Wing 45th Regiment Native Infantry, are confirmed.

The Commander in Chief is pleased to make the following removals and postings of Medical Officers.

Surgeon F. S. Matthews, (on leave to the Cape) from the 34th to the 64th Regiment Native Infantry.

Surgeon R. Tytler, M. D., from the 48th to the 34th Regiment Native Infantry, at Midnapore.

Assistant Surgeon T. B. Hart, from the 56th to the 48th Regiment Native Infantry, at Seetapore.

Assistant Surgeon R. Grahame, from the 71st Regiment Native Infantry to the 3d Battalion of Artillery, at Cawnpore.

Assistant Surgeon A. Chalmers, M. D., to the 71st Regiment Native Infantry.

Hospital Apprentice James Jarves, now at the General Hospital, is appointed to act as Assistant Apothecary and Assistant Steward to a Detachment of His Majesty's Troops under orders to proceed from Fort William to the Upper Provinces.

Mr. Jarves will immediately report himself to Assistant Surgeon A. M. McK. Minto, and he will return to his duty in the General Hospital after the Detachment shall have reached its destination.

ORDERS BY THE RIGHT HONORABLE THE GOVERNOR OF BENGAL.

11*th Feb*. 1835,—Doctor J. R. Vos, Police Surgeon, for one month, on Medical Certificate.

ORDERS BY THE HON'BLE THE GOVERNOR OF AGRA.

27*th Jan*. 1835,—The leave of absence granted on the 30th ultimo, to Mr. C. Madden, the Civil Assistant Surgeon of Futtehpore, for one month, on private affairs, is cancelled at his request.

4*th Feb*. 1835,—Mr. H. Cooper, Civil Surgeon of Bareilly, for nine months, on Medical Certificate, from the 1st of March to the 30th November next.

25*th Feb*. 1835—Dr. James Graham, Surgeon, 42d Regiment Native Infantry, is appointed to Officiate, until further orders, as Civil Surgeon and Deputy Post Master at Delhi, in consequence of the absence of Dr. J. Ranken on leave.

Mr. J. Ranken, Civil Surgeon of Delhi, for two months, from the 1st proximo, to visit Calcutta, on account of private affairs, in extension of the leave granted him by the Commissioner of Delhi.

TO CORRESPONDENTS.

The following communications have been received and will appear as soon as possible.

Case of tumour of the Scrotum. By Dr. Vos, with a drawing.

Case of Lithotomy. By Dr. Mackinnon of Tirhoot.

Account of a poisonous fish of Nipal. By A. Campbell, M. D.

Description of a double action Tooth Lever for perpendicular Extraction, with a drawing. By G. Evans, Esq.

We are obliged to Dr. Wight, Madras Medical Service, for his pamphlet on Mudar: and to Dr. Malcolmson Secretary to the Madras Medical Board, for his letter which accompanied it Dr. Malcolmson asks;—"Is the 'gigantic swallow wort or the Asclepias gigantea' found so abundantly by Capt. Franklin in Bundelcund the Catropis procera?—an editorial note from you would obtain the information from the able Medical officers now in that district." We hope it may, but our botanists seem to us to lack somewhat in zeal; for of all the papers that have reached our hands on subjects connected with medical science, not one have we yet had of a purely botanical character.

Other communications in arrears shall be inserted as soon as possible: meantime we apologize for the unavoidable, and in some instances long, delay that has taken place.

Ghureeb oollah

aged 9 years

born in Fureedpoor Zillah at Nya Baree, Cominja.

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ORIGINAL COMMUNICATIONS.

A CASE OF LITHOTOMY,

By Dr. K. Mackinnon, Tirhoot.

Bhurossee, a boy five years of age of the Toorûâh caste, was brought to me on the 22nd of last month, for advice.

A very short conversation with the father served to convince me, that the boy must be afflicted with stone in the bladder. The symptoms were most unequivocal. I had no sound sufficiently small to pass into the boy's bladder, but having had one made by a lohar mistree, I immediately detected the presence of a calculus. The convexity of the sound touched it as it entered the bladder, and it could always be made to do so by depressing in the direction of the rectum No motion of the sound could move the stone. That and the dull heavy touch the contact occasioned, induced me at once to conclude that the stone was of a large size. The boy was also of very delicate appearance, thin and emaciated, and labouring under diarrhœa, with prolapsus ani—the usual concomitant of stone in the bladder, especially in young subjects. Passing the sound always brought on violent spasms of the bladder and rectum, with erection of the penis. Seeing that the child's life could not be of long duration, if left unassisted, I resolved to operate, although the case was an unfavorable one, and though I had no instruments but such as I could get made in the bazar. In the meantime, I thought it advisable to prescribe remedies for the intestinal irritation. Some doses of rhubarb and calomel were given with apparent benefit, and opiate injections allayed, for a time at least, the spasmodic action.

This day the 2d, at 2 P. M., I performed the operation, having previously administered a purgative injection—throwing up, after it had operated, about an ounce of water with thirty drops of laudanum. Having secured my little patient, I made the external incision in the usual manner, and after the integuments were divided, I held the rectum aside with the fore-finger of the left hand. I found some difficulty in distinguishing the staff, sufficiently to cut upon it; owing, I suppose, to its being too small. The same cause rendered the utmost caution necessary in pushing my knife on to the bladder (a common scalpel guarded half blade up with lint.) Fixing it well in the groove, and seizing the staff, I accommodated both to the direction of the wound and passed the knife on. A free gush of urine followed. I withdrew the knife carefully, passed my finger, and found the prostrate and neck of the bladder freely divided. The stone was evidently of a large size and filled the opening as a natural presentation does the dilating os uteri. I thought it advisable to extend the wound—the stone being so large—and I did so with a very indifferent bistoury but the best I had: I passed it along the fore-finger, and when it reached the bladder, I turned its edge in the direction of the wound already made. Strong muscular action of the parts attended this part of the operation. Having enlarged the wound as much as I could with safety, I again passed my finger and was able to detect more accurately, that the stone, from its size, seemed to fill the cavity of the bladder. I passed up then a very rude pair of forceps, and attempted repeatedly, but with great caution, to seize the stone between its blades. The stone so completely filled the cavity that there was not room to open the forceps. I tried to push the stone back with my finger but could not. Having failed in these attempts, I tore asunder one pair of forceps, and used one blade in place of a scoop, with which I endeavoured to turn the calculus, thinking that it lay on its unfavorable axis. After much trouble I succeeded in this attempt and again passing the finger, I found I had gained a little room. The stone was, after some further trouble, firmly fixed between the blades of the forceps. The difficulties of the operation were, however, not yet overcome—the size of the stone rendered its extraction difficult and tedious, and the force, necessary to be used even after the free incisions I had made, induce me to think and fear, that the issue of this case will too probably be fatal. Whatever it may be, I shall not fail to record it, and shall add the account of the progress of the case, per-

haps the termination of it, up to the date of my dispatching this. It is but discouraging to a Surgeon, to have such a case, for his first operation. Had the stone been of ordinary size, my first cut into the bladder would have sufficed, and I think I should have had it in less than 3 minutes. The faultiness of my instruments must be taken into consideration also. The stone weighs 9½ drams. It is of an oval shape, its long circumference is 6 inches, its shortest above 4 inches. It appears to be of Lithic acid composition, with an outer layer of the triple phosphate.

2d March 8 P. M.—I omitted to mention that after having extracted the stone, I injected the bladder well out with several syringes full of tepid water. I then lost no time in unbinding my little patient. The removal of the stone gave instant relief, of course; but about 5 minutes after the operation, he complained of pain, a good deal. I gave 10 drops of laudanum, and fomented the abdomen and perineum. The pain soon ceased and he appeared wonderfully comfortable. When I came back from my evening drive, the little fellow was sound asleep. I saw him—he looked placid and tranquil.

3d March 5 A. M. I have just seen the boy who has passed a comfortable night. The bowels have acted several times during the night, and urine has come freely through the wound, which looks well. Close to the verge of the anus, the wound has some fœces upon it. It may be that the rectum has been slightly wounded. If so, that must have happened during the contractions that took place, whilst I was enlarging the wound with the bistoury—a most awkward one with a long narrow blade and very short and weak handle. The boy's countenance is good. He is free from fever and talks in a lively manner.

5 P. M. Goes on well. No bad symptoms, except a considerable degree of intestinal irritation, as before the operation. The motions are somewhat slimy, and he has been slightly sick once or twice; no tenderness any where over the abdomen. I have seen no fœces pass by the wound nor any urine from the rectum; but his attendants tell me they have seen the former The rectum is therefore, I suppose, wounded. The greater part of the fœces pass by the anus. I passed my finger up the rectum just after the operation—and did not discover any wound. He is a most wilful little fellow, and will take no medicine, and little food, as I wont let him have a piece of kid. I have got him to take some spoonfuls of arrowroot, which were retained.

4th March, 5 A. M. Has not passed so good a night, moaning and whining a good deal towards morning, with tormina and irritation of the bowels. The pulse is yet good and he has no tenderness, and no heat of skin, and no collapse of countenance. The wound too looks well—and the urine continues to come freely. After much trouble I got him to swallow a spoonful or two of an electuary made up with castor oil, sugar, peppermint and some drops of laudanum—I thought of putting him into a warm bath, but did not.

12 M. Soon after my morning visit he went to sleep—and has been in a quiet and peaceful slumber ever since.

2 P. M. Has awoke and appears quite comfortable. The oil has just acted once copiously.

5 P. M. Continues the same, and wishes much for his beau ideal of the good things of this life, a bit of kid.

I have now hopes of the boy's recovery though not very sanguine ones. As far as the operation goes, he appears pretty safe, but the bowel complaint may carry him off slowly but surely.

10 A. M. 5th March. The boy has had a very comfortable night, is going on very favourably, but there is yet some diarrhœa. The wound is gaping but looks well upon the whole.

K. MACKINNON, M. D
Asst. Surgeon.

Moozufferpore,
4 P. M. *5th March.* 1835.

HUNTER'S REPORT ON CHOLERA.

Particularly as it occurred, in the Right Wing of the Queen's Royals, in the Town Barracks of Bombay, in August 1833.

These Barracks, raised in double rooms upon Bomb-proofs, form three sides of a square opening westward. The officer's quarters, built in the same way, would complete the square, did not the thoroughfare to Bazár Street interpose. The east and south sides are tolerably open, but the north and west are closely surrounded by narrow dirty streets, in which most of the houses are very high. There is no regular hospital attached, but half of the Right Wing barrack was separated off for a temporary one, and an accommodation for the hospital servants.

Cholera, though prevalent and fatal amongst the natives in and about Bombay, in April and May, did not more than usually shew itself in the Queen's in Colaba till the middle of the latter month. Even then it only continued very partial for a few days and gradually subsided. In June it returned more alarmingly in a detachment of fifty men, who had been over in

the native town, as a guard at the procession of the Taboots, the two previous days. In July it again broke out in the Left Wing in Colaba; but its greatest visitation was in the Right, in the Town Barracks, in the beginning of August.

The first attacked was a ward boy, about 3 P. M. of the 1st. The second, a few hours after, a patient just recovered from dysentery: The third, about 9 P. M., a patient with diarrhœa, in a bed directly opposite; and about 1 A. M, the only two others with bowel complaint in that ward—of these four Europeans, only one of the last recovered. The next, a weakly scrophulous subject, only a few days out of hospital, was admitted at 3 A. M. of the 2d from the very opposite corner of the Barracks, and also died in a few hours—after this they were seized in all directions; in barracks, on the Town Guards, and in the Hospital. In all, from the 1st to the 6th, we had forty four decided cases of cholera, exclusive of nearly as many of diarrhœa or colic, closely approaching to it; and of these, seven proved fatal, all admitted on the 1st or morning of the 2d. Besides patients in hospital, nine were attacked whilst waiting on sick comrades, or immediately after.

On the morning of the 2d, from the tendency the disease evinced to spread in Hospital, and to relieve the wards for fresh admissions, we commenced to send off the other sick to the Regimental Hospital in Colaba, but getting slowly on with two dhoolies, I mentioned the circumstance to the then Commanding Officer, Colonel Baumgardt, who immediately suggested and granted us palanquins "ad libitum"—By this means they were soon all off, but not in time to save the only other patient with bowel complaint (a convalescent in another ward), for he had scarcely reached his destination, when he also was seized, and died a day or two after. Next morning we again relieved the wards by sending off to Colaba in palanquins, the convalescents, which mostly were in from twelve to twenty hours, and continued to do so till the then superintending surgeon Doctor Wallace, (who also readily afforded us every other assistance) allowed us to send them to the General Hospital, which was close at hand.

The first cases were accompanied with vomiting, severe purging and very rapid sinking, but the cramps were slight, and chiefly confined to the lower extremities. Gradually, however, as the disease extended, the purging and sinking diminished, whilst the cramps increased, extending to the abdomen, and ultimately approaching convulsion. On the evening of the 3d and morning of the 4th it generally required two or three men to hold them, on first coming in. After that the cramps also declined till the morning of the 6th, when the disease subsided. Nausea, headache, and griping, however, were frequent for some days later.

With regard to the treatment adopted, we may say it did not differ from the usual routine, except perhaps in the omission of bleeding in the first cases, which we were induced to do from what we had experienced of its effects in similar cases, and particularly of that year. Whether that contributed or otherwise to the mortality, must be mere conjecture—we lost none, it is true, after we commenced to bleed on admission (about 11 A. M. of the 2d), but these and the first were very different—Of thirteen admitted in the course of a couple of days, in the beginning of June, (except an apprentice at the same time) not one was bled. We lost four of the first, but none after. In the worst forms, it matters little any way, but betwixt that and the opposite extreme, there are probably cases where it is of vital importance to judge rightly. We certainly were imbued with the empiricism, bleed in cholera, till taught that it, like other diseases, was not the same in all constitutions, seasons and localities. The only rational method to us appears to be, to try first, like Sydenham, to find out the reigning constitution of the season, and then take into account the more immediate circumstances, connected with each individual case. The other treatment consisted in scruple doses of calomel and opium, repeating them according to circumstances; the warm bath, except in the cases with rapid sinking, and the usual stimulants. When recovering, small doses of calomel and opium, with occasionally castor oil or salts—sago and wine.

As for the kind of internal stimulant, we consider it a matter of indifference, and therefore think, where a number are together, the readiest is by far the best. We tried a great variety, including concentrated doses of Liq. Ammon, and Phosphorus, but latterly had chiefly recourse to brandy and water in equal proportions. Blisters to the epigastrium we thought beneficial in almost all cases, and preferable to mustard poultices. The latter give great annoyance, and are too transitory in their effects.

But of all the cases of cholera, those are the worst which succeed to great fatigue or diarrhœa. The diarrhœa is often considered merely cholera in an incipient state—perhaps it frequently is. At least it is always a powerful predisponent, but so also is a strong cathartic, and particularly if combined with the tartrite of antimony. So convinced we became of this, that the latter medicine seldom entered our pre-

scriptions the last year in Bombay, and when it did, it was in very minute proportions. It is perhaps a curious fact, that of the eight who died, including the convalescent sent to Colaba, seven were, or had been in hospital within the previous fourteen days, with diarrhœa or dysentery. As in other epidemics, the first were always the most fatal, and the most fatal, these with the slightest cramps. Indeed the solitary cases, we had at all seasons at that station, were chiefly of this description, which is perhaps the reason bleeding was so unsuccessful in our hands. Bleeding, however, did not seem so prejudicial the two previous years, and I think, it is better borne in the Fort than in Colaba. The cause is not perhaps very obvious, tho' it may in some measure be accounted for, from the strong disposition to purpura, and disease of the heart and blood vessels; these most probably a consequence of some morbid state of the blood, which always existed in Colaba. By the latter, we lost three or four annually ; and after the first ten months, had almost always some of the former in Hospital.

The grand cause of the visitation, more immediately in question, is as usual, a mystery, but the predisposing and exciting, may be attributed to several circumstances; and particularly to the unusual heat and dryness of the season. The two previous years, by the end of July, we had forty five and fifty eight inches of rain, whereas in that, we had only thirty. At its commencement, the weather was close and cloudy, threatening rain (about full moon), and that we observed was, far the most favourable for Cholera. These, however, were general causes, but neither the Wing in Colaba, the artillery in Fort George, nor any of the native troops suffered at that time. Indeed whatever it was, it seemed to be confined to the upper rooms of the Town Barracks, for not a case occurred amongst the married people below, nor amongst any of the officers' servants—(I never saw an officer with Cholera). But if the cause of its origin be unknown, that of its rapid change and disappearance is equally inexplicable, for though the weather was a degree or two cooler, there was no rain for some days after (the change of the moon)—after that, however, when the rains set in very heavy, we had scarcely any return.

With regard to Cholera ever becoming contagious in this country, there may be some difference of opinion ; but if by contagion we mean a morbid poison, generated in one body, which when conveyed to another, through the medium of the atmosphere, excites a like disease in it, provided the person is predisposed, and the epidemic constitution of the season or locality favors it, *but not otherwise*, I am now inclined to believe it occasionally does—(plague itself is only thus contagious)—No disease, the exanthemata excepted, appears to be in any degree contagious in this country, unless under the most favorable circumstances, and therefore very unequivocable proof can seldom be looked for. What first struck me was the following circumstance. In June 1833 when nine cases were admitted in the course of a few hours of the men who had been over at the procession of the Taboots (no others from Barracks were admitted of that time), the apprentice of the ward was attacked whilst waiting on these men, the only case I ever witnessed in that class of persons—shortly after, the apothecary was seized with vertigo and head-ache ; and in the course of the night, the Hospital Sergeant with cholera. Again in the Fort, how is the great proportion in Hospital otherwise satisfactorily to be accounted for? The chief objection to me is that I know of no other disease without fever, being contagious—small-pox for instance, is contagious, but cow-pox is not, because it is unaccompanied by contagious fever. Puerperal peritonitis, phlebitis &c. &c. are contagious, but is it not the fever that makes them so ? Simple gangrene is not contagious, but Hospital gangrene is, because it is accompanied by contagious fever. Dysentery is now said not to be contagious, but I think from a partial view of the subject—when the fever with which it is united becomes contagious (which it no doubt would under favourable circumstances) I think there is no doubt that it is. Diseases seldom contagious at the present day, were frequently so formerly, when less attention was paid to ventilation and cleanliness—but still in all these, it is the fever which first becomes contagious—Cholera with fever, contagious, can be easily comprehended ; but without fever, is the difficulty.

From 1st January to 31st December, 1833.

Strength, average 800 { admitted—Cholera 170, of whom died..... 29
Colic.... 120 ... 0
Diarrhœa 190 ... 1

N B. A great proportion of the second and a number of the third, might have been called Cholera, but we admitted none under the latter but decided cases—as Cholera itself is a species of colic, we did not hesitate to make free with the latter term.

M. Brady—æt : 38—15 years in the service—9 in India. Has been subject to slight pectoral symptoms upwards of a year, but paid little attention to them, till July last, when he awoke one morning,

with a constrictive feeling at praecordia, followed by a sensation as of something giving way, and a copious expectoration of blood. The latter has since been twice repeated. Present state—Has Dyspnœa and cough with scanty mucous expectoration, tinged with blood—apyrexia—P. 80 harsh —Physical signs : permanent double bellows and saw sounds over all the chest anteriorly and laterally. Harshest and loudest over cartilages of right 1st and 2d ribs : more superficial and whiffling over upper third of sternum : deep and obscure in cardiac region, but gradually becoming more distinct to junction of left sixth rib and cartilage—does not attain here, however, to more than single bellows accompanying systole, and demi-bellows accompanying diastole—purring tremor betwixt right 1st and 2d cartilages ; also with harsh single saw sound over both clavicles, particularly the left. Respiration masked over right chest anteriorly and laterally : generally but not always very obscure in right subscapular region, with now and then a sanguineous guggling—respiration peurile over all the left chest, but in some measure masked anteriorly—diagnosis—hypertrophy of left ventricle. Pulmonary apoplexy of right lung—aneurism (dilatation) of aorta.

Poona 1*st Oct.* 1834. } Prognosis ; death within six months.

Died in Bombay 30*th December* 1834.

Dissection Report received. "Heart larger than natural"—"walls extremely thick"—"right lung gorged with dark coagulated blood"—"an open ulcer under cartilage of 2d rib, in anterior part of upper lobe, through which the blood flowed into the cavity of the thorax."

My idea of the above was that the first link in the morbid chain was, dilatation of the aorta, which forming an obstruction to the current of blood, excited the ventricle to increased action and consequent Hypertrophy. That the Hypertrophy tended rather to increase the dilatation, and consequently the propelling power not being able to keep pace with the resistance the blood accumulated behind, first in the auricle and then in the lungs, till it ultimately ruptured the pulmonary tissue and effused itself into the air cells forming pulmonary apoplexy.

The first is certainly not proved by dissection, but neither do I think it is disproved. At any rate, by the stethoscope alone could we have said that the pulmonary apoplexy depended on organic disease of the heart, and would certainly prove fatal. Had the obstruction been in the aortic valves, or in any part, where the attempt of nature would not have increased what it was designed to overcome, it is evident pulmonary apoplexy would not have occured.

M. Madden, æt : 28—eight years in the service—six in India. States that he has been subject, for upwards of two years, to pectoral symptoms, particularly on exertion, but not so as to prevent him doing his duty till nine months ago.

Present state—aspect pale, dirty and exsanguineous—complains chiefly of Dyspnœa and violent beatings in left breast—apyrexia—P. now 48—sometimes upwards of 100—physical signs—cardiac region, raised and pulsating, yields very dull sound on percussion—respiration unnaturally full over all the chest—heart's impulse strong and heaving in cardiac region, and frequently perceptible in subclavian and left subscapular region—harsh saw sound over junction of cartilages of 5th and 6th ribs, corresponding with the diastole ; with very distinct purring tremor over the same part—also a small Piston sound corresponding with the systole—diagnosis ; hypertrophy of left ventricle, and diseased mitral valves—prognosis, Death within 12 months. October 1st 1834—Invalided to Bombay, left Poona 10th Nov. 1834—Died in Bombay December 30th 1834—returned also, "dysentery."

Dissection report received—"Heart extremely large, preserved for examination by Doctor Collier, Dep. Insp. of Hospitals —If we ultimately get the state of the different parts, we shall not fail to forward it with our next communication—If we are right about the *mitral* valves it is very probable the left auricle and perhaps right ventricle will be found also more or less dilated.

The hypertrophy in this case, I conceived was caused by some morbid alteration of the mrital valves, permitting regurgitation, whether or not such was the case, has not been proved.

In the event, however, of these valves being so diseased, simple hypertrophy at least of that ventricle would be the result.

Here we had no pulmonary apoplexy ; because the hypertrophy, keeping pace with the obstruction, enabled the ventricle to carry on the circulation.

With regard to treatment suggested by the above diagnosis, it is only necessary to say, in the first, the antiphlogistic would be the best, but in the latter with moderation, lest by lowering the powers too far the efforts of nature should be rendered nugatory, and a stop put to the circulation and life of the individual.

Thomas Reed—æt : 26—8 years in the service—6 in India—delicate habit—has been some months in the Hospital with hectic symptoms—on enquiry, states that he had some acute affection in left chest, several years ago, but with the exception of slight dyspnœa, enjoyed very good health till he returned to Poona in December last—does not attribute his complaint to that. Present state—aspect emaciated and phthysical—no pain, cough nor expectoration—has frequent irregular paroxysms of fever, accompanied with copious perspiration, but is sometimes free of them several days together. Physical signs—left thorax much contracted and flattened anteriorly, particularly in mammary region—respiration not audible in that region, and very obscure in subclavian and subscapular—puerile over all the right chest—loud bronchophony in left subclavian region, and sound of heart as distinct as in cardiac—diagnosis—carnification of left lung, with contraction of chest, consequent on pleurisy and empyema.

Prognosis : Incurable, but life may be prolonged by a warm equable climate—totally unfit—invalided. 1st October 1834.

In this case the general symptoms afforded no clue to the diagnosis, tho' the least of the physical (simple Inspection) was perhaps sufficient—nevertheless the stethescope was not without its use.

Carnification of the lung was a supposition, as this with tubercles, and not hepatization, is the general consequence of empyema.

Camp Poona,
2d Feb. 1835.

R. H. A. Hunter.
Assistant Surgeon
Q. R.

Gentlemen,—If you think the accompanying report on Cholera, or the cases of pectoral disease accompanying it, of sufficient value, you will kindly spare a corner for them at your convenience—the former is meant for a kind of history of an epidemic on a small scale, going quickly through its course, and thus perhaps an outline of what may be expected in one slower and more extensive—It will be observed it went through the same in May, in June in July, and in August, tho' most perfect in the last—Some might perhaps have been inclined, in August, to move the Wing at once ; and indeed, the idea did strike us, but where were we to go in the rainy season ! On to the wet esplanade, or to Colaba where we should crowd the barracks, and perhaps render things worse—something, no doubt, must have been done, and indeed arrangements were being made by the deputy inspector as fast as possible, in case of necessity—As it changed however, we hesitated ; and by the second evening, had given up all idea of moving, though the admissions had by no means diminished—If the pectoral cases are approved, perhaps we may be able to give you a few more—we have now two cases of cardiac disease in hospital—one we suppose, hypertrophy with dilatation of left ventricle, and dilatation of aorta—the other, dilatation with hypertrophy of right ventricle, and a lesser degree of the same of left. It is to be understood, however, I only commenced the stethoscope in July last, at the recommendation of deputy inspector Collier. The Cyclopædia of medicine has been my chief guide (I have seen Forbes, and the edition of Laænnec of 1829, by Forbes —) and its language I have tried to adopt.

Your's, &c.
R. H. A. Hunter,
Queen's Royal

ON THE EFFECT OF TATTIES IN BENGAL.

To the Editors of the India Journal of Medical Science.

Dear Gentlemen,—As the pages of your excellent journal are not strictly confined to Medical subjects, I trust you will give me the benefit of your opinion on the use of *Tatties* in Bengal. My experience is against their use, and I shall now add the result of my observation on the subject as regards reducing the temperature of the air and the effects of such air on the system.

1*st.*—In the Upper Provinces a continued breeze blows in one direction for several months together, and the air is of a high temperature, and dry. In such situations the use of *Tatties* must be most delightful, and at the same time not injurious to health. This dry air passes through the fragrant damp cuscus grass and absorbs a considerable portion of moisture and thus reduces the temperature of the air in the house many degrees. In Bengal, however, the case is very different. The breeze is much more variable, is not so hot, and, as it has passed over the Indian Ocean, is loaded with moisture. The effect of Tatties is therefore very different from what it is in the Upper Provinces ; a smaller quantity of moisture being absorbed by the breeze, and a much less degree of cold produced, which varies with the force of the wind. When slight airs prevail very little moisture is absorbed and a refreshing degree of cold is produced.

2*nd.*—*Effects of Tatties on the system.*—Behind tatties the additional dose of moisture in the air produces that most disagreeable, oppressive feel which we experience at the end of the rains without absorbinga sufficient quantity of moisture to re-

duce much the temperature of the air; and thus loaded with moisture it prevents the perspiration being absorbed, and the body cooled. So powerful is the evaporation from the surface, and the cooling process thereby produced, in this way that the operation of high degrees of temperature on the body is prevented acting prejudicially. When a tattie is employed in Bengal the heat is lowered by a slight additional absorption of moisture, and this is continually varying according to the degree of wind; at one time there is a *lull*, and half an hour afterwards a strong breeze blows. When a person is placed near a well watered tattie thus acting, must it not have a prejudicial effect on the health? My experience leads me to that conclusion, and the bad consequences produced inflamations, particularly such as are liable to occur in individuals whose constitutions are not in a healthy state; or persons whom you would call predisposed to disease. On such persons tatties act as a powerful exciting cause. For guarding against such evils the tatties, I conceive, must be abandoned as ineffectual, and prejudicial to health in Bengal.

The only preventative against the heat in my humble opinion is to shut up your house, and use the punkah; and in doing this, I believe it will be of much greater importance to health than is generally supposed, to have the house well ventilated by spaces, left at the side of the extremities of the beams or other apertures near the ceiling, to allow the vitiated air to escape. It is a well known fact that each person destroys the oxygen or revivifying principle of a gallon of air in one minute; so as to leave it unfit for being again inhaled. To make up for this loss the use of flues to convey air from some distance under ground so as to cool it before it enters the house will be used with great advantage. When we recollect the large body of air which is rendered impure by breathing, it must be owing to our spacious houses that our health is not more impaired than it is by this cause. Even in our palaces are not our pallid faces, shrunken limbs, and nervous, debilitated bodies owing in part to this cause? Compare such persons with the ruddy faced Indigo planters with the prospect of a good season. What a contrast do they afford! and is it not chiefly attributable to exercise, and breathing pure clean air? W.

ON THE WANT OF CONFIDENCE IN EUROPEAN MEDICAL SKILL AMONG THE NATIVES OF INDIA.

To the Editors of the India Journal of Medical Science.

DEAR SIRS,—It is with much joy I find by the number of your journal for January, that I have been the humble instrument, through your publication, of inducing Mr. Tytler to come forward with his testimony on the important subject, of the want of confidence among the natives of India in our Medical skill.

I trust this is a prelude to much more evidence on the same point, and that the example of one of Mr. T.'s talents and experience, in enlightening the public on what so vitally concerns the medical profession, may be imitated and appreciated by us all —the recording of evidence on this head is all we want; full well do I know that with the world at large as a jury, the verdict will bring full conviction, and that the European medical men of India on the one hand, and the natives on the other, will have to stand in the unenviable situation of associating in mutual ignorance and distrust.

With my joy, however, a little vexation is mixed on observing the interpretation put by Mr. Tytler on my motives in agitating this question, but it is such vexation as arises out of self-blame. I must have been at fault in expressing clearly my meaning. Now however I declare solemnly that I had not for a moment the purpose of throwing blame on Mr. Tytler, and that neither he, nor the native medical institution, entered my thoughts in connexion with the much more important matter alluded to, in my letter to you of September last.

Why should I wish to blame Mr. Tytler? I have no knowledge of him personally, and all I know of him publicly goes to convince me that he is an honor to the Indian body medical. As for an attack on the native medical institution and a condemnation of a whole class of public servants, of which he accuses me, I equally disclaim it, with reference to the same letter, while at the same time, (with due respect for Mr. Tytler's sensitiveness) I conceive that every man may (if chivalrously inclined) attack a public institution, and public servants too, and demolish both in the world's estimation, if they cannot defend themselves, and the continuance of their public and official existence, on the only basis they ought to have, viz. general and practical utility.

You have exactly comprehended my motives, and shewn I hope to Mr. T.'s satisfaction, that the mention of a native doctor's name was made the more strongly to illustrate what I felt keenly and painfully; that we (medical men) want to a lamentable extent the confidence in our knowledge and skill requisite for the benefitting of our native fellow subjects, and indispensible to the general diffusion throughout India of European medical science. I could have furnished you with a dozen recorded cases

from my own small experience on this point, all of nearly equal strength with that of Pursad Singh, and with five times as many less strongly marked ones, from memory. But it is not the amount of evidence given by one witness that is valuable, (because *he* may be chiefly to blame for inability in gaining the confidence of natives) it is the number of men differently constituted, testifying to the same fact that makes it a true or false one. And on this account it is, that Mr. Tytler's vaccinator, and my native doctor given separately carry ten times more weight with them, than would a dozen of equally good instances related by a single individual.

But who denies the fact of a lamentable want of confidence among the natives generally in our medical skill. Not Mr. Tytler at all events, nor you kind Editors, I have seen during my short sojourn, about 50 medical practitioners exercising the duties of our profession throughout portions of British India, but not *one* who seemed to me to enjoy a tithe of the confidence in his skill which is implicity reposed in in any old woman of a Bazar, or village who may choose to exercise the healing art or that the Baid or Hukeem of an Indian town or city posessess. Let Mr. Burnard of Benares, Messrs. King and Davies of Patna, and Mr. Ranken at Delhi give the results of their experience *with reference to the number of inhabitants in each city*, and let some or all of one Regimental and Zillah Surgeons from Point de Galle to Simlah, fairly and candidly state, how far they have succeeded in gaining the confidence of Natives *not in the public service*, or who may have sought advice, to aid in serving a political or other worldly purpose.

The confidence of the Sipahees (supposing it to exist) is not voluntarily tendered, because, they are necessitated to go into our Hospitals when unfit from sickness to do their duty, nor can the confidence of the Amlah in our civil and military offices be so either, if we bear in mind some very prominent features of the native character. Who has not seen or heard, when a Surgeon is on terms of intimacy and friendship with a Judge or Commissioner that the natives in office (or hoping to be so) are most anxious to conciliate the good will, and gain the good word of said Surgeon. If he is desirous of native patients the disposition is soon known to all around, in fact his shauk (hobby) gets wing, and those who fancy that aught is to be gained from the authorities through his favor, flock to him for Medical advice as a means, merely, of making his acquaintance, and humoring *his weak point* but with little confidence in his skill, and less intention of swallowing his physic, on any other terms he is generally without patients.

The experience of Calcutta practitioners may possibly be at variance with the state here hinted at; if so, it will not be of much account: those of that body who could testify to the want of native confidence would not probably do so, lest the same should hurt their practice, and if all the metropolitan's in a body expressed a conviction of the existence of the fullest confidence among the natives in their skill it would not matter much to the general question. Calcutta is but an outpost, a sea-port too, and one city out of the hundreds of broad India, at best is but a "Tower of Babel" where people of many nations, kindreds, and tongues are assembled to form the motley mass of a mongrel population. The British provinces alone, and the Native states are the depositaries of the little nationality left to the people of India, and the strongholds of such powerful prejudices, as ever lay hold on the partially civilized and unfortunate portion of the human race.

The causes of this want of confidence (experienced by Mr. Tytler and me, but to be proved, or disproved, as existing generally by further testimony) must, I fear, bear more heavily on the heads of the medical men than on the natives, else how can we account for the unprecedented picture of affairs presented by British India. Here we see about 90 millions of our fellow creatures virtually surrendering to a handful of foreigners their dearest rights and most vital interests; they think not—they act not in a national or social sense, but as we direct or indicate, yet the meanest of the mass has not faith, even as a mustard seed, in the skill we possess for the relief of bodily suffering. In the honor, honesty, truth, and integrity of an English Surgeon, the confidence of a native is unbounded, his word he will receive as more sure and binding than the written bond of his countrymen, yet in the hour of pain and sickness he will seek aid and comfort from his own nation's child, however illiterate and rude, rather than from one with whom he has not mental fellowship.

The character of our nation secures to us the first species of confidence; it is the individual character which I fear deprives us of the latter.

To see our faults, is the first step towards mending them. Let us then look at the evil and set about the remedy. Mr. Tytler has noticed some of our faults, and when he finds that we are both equally anxious for the full confidence of the natives in our skill, I think he will acquit me of all wrong in respect to a fellow labourer.

Too true it is that neither of us can see (in this birth at all events) any material change effected in the native mind on this head, but that would be a poor reason for our not endeavouring to bring about a consummation so devoutly to be wished, for those who may come after us.

With the affirmative to Mr. Tytler's three questions, I can from observation agree not to satisfy me (as Mr. T. says) that it is "not wonderful that a person, not perhaps originally of great intelligence, should be unable to appreciate European Medical skill" for of that the merest driveller in the study of his species must be satisfied, but to shew more strongly than I can in any other way the necessity that exists for self-examination among us, and for efforts strong in proportion to the opposing forces, for the establishing of a due confidence in our Medical skill throughout the natives of India.

First then, I believe that some Medical men treat Natives and their complaints with haughty indifference, but not frequently, nor is this, *too common sin among Europeans* the greatest one *we* have to answer for. It can be remedied by a very little reflection and self-discipline.

Second. I have seen very few medical men who can converse, with ease, or correctness in the native languages : or who are well skilled in native habits. This is a rock we split on, and an unfortunate one it is too ; for, who can expect to mitigate the miseries of sickness, or bring comfort to the afflicted minds of his patient's friends and relatives, without the possession of that surest key to the heart and feelings of a fellow-being—his native language.

The authorities of India may aid us to the remedy here, by ordaining that every medical officer throughout India shall pass an examination in one of the native languages (the choice to be made by the examined) before he be permanently appointed to the charge of a Native Regiment, Zillah, or Political Agency at a Native Court.

Third. I regret that I have seen the success of Native practice when my own appeared futile to the patient, and I could relate some striking instances of this from those which I have treasured up, as incentives to increased energy and diligence. I believe, however, that this arises most commonly from the patients seeking native advice, at a time when we have paved the way to health by previous treatment. The detriment is the same in amount to us, for all are glad of an opportunity to trumpet the success of a native practitioner, in a case where the Feringhee was beaten.

The greatest fault of all which we have to answer for, is apathy and indifference to the fame of our profession, and indolence, as regards our own advancement through its means. There are not much above 1,000 of us, spread throughout 100 millions of the human race, yet we are *all* in poverty, and the major portion of us unemployed. Let us but have a small share of confidence in our skill, and what a field of usefulness and honor does not India expose to our exertions !

A CAMPBELL.

Nipál, January 1835.

EVANS ON A DOUBLE-ACTION TOOTH LEVER.

To the Editors of the India Journal of Medical Science.

Sirs,—I beg to hand you a sketch accompanied with a description of what I consider to be an important improvement, on the Punch or Elevator commonly used to detach old stumps and remains of teeth left by accident or decay, and to which I have applied the name of the "DOUBLE ACTION TOOTH LEVER." Should you deem it meriting a place in the pages of your widely diffusing and useful journal, you will oblige me by inserting it.

The difficulty, and pain, and often times impracticability, of dislodging by the common instruments in use, old, decayed, and deep seated stumps of teeth from their sockets ; arising either from the misapplication or imperfect construction of the instruments usually resorted to for extracting them, has long appeared to me an opprobrium to the mechanical as well as to the surgical art, and in the course of my practice in this department of the profession, I have often been led to deplore the inadequacy of our means to the safe and judicious performance of some of the more difficult operations on the teeth. To obviate therefore as much as possible the defects and inconveniences, I, in common with many others, have experienced, and to add my humble mite to the stock of useful improvement, I have for some time past been labouring, and it is not without hope, that I expect soon by the modifications I am contemptating, to effect some other useful improvements in the construction of the instruments of the present day —as well as in the mode of their application to each distinct class of the teeth, for which they ought exclusively to be designed.

The drawing that accompanies, represents the instrument I am in the daily habit of using, simple enough in its construction, and correct on mechanical principle ; and as its use has hitherto been confined to my own private practice, I may fairly claim to myself the originality of converting the single action of the common Lever, or Punch, into a compound Power, by the simple

addition of a second Lever of the same description, only differing in length according to the side of the jaw to be operated on—in which combined form it possesses such decidedly superior advantages over the single one, as to have answered my expectations most completely.

The inefficiency of the elevator when used singly to detach or raise from its bed a deep seated fang, is obvious, and must be known to every one who has ever employed it, or has suffered under its tortures. In the first place, the practitioner with the single lever can command but a limited power, from its purchase being comparatively slight and insecure, leaving out of the question the total absence of a fulcrum for it to play upon, and on which the success of the operation so much depends; and if the instrument slips, which is not unfrequently the case, the risk of injuring the tongue, or penetrating the chamber of the nose, by piercing the palatine plate, or otherwise forcing the shaft of the instrument through the cheek, inflicting in this way a severe and unsightly external wound, is greatly enhanced, and, very justly, is much to be apprehended. In the next place the degree of force sufficient to dislodge from the alveolus a deep embedded fang, cannot with any precision be determined on, or apportioned at the time of its action, and which is a serious objection to its use as it is often the cause of its failure; again in those instances where the root of the tooth is long and laterally grooved or double, as is frequently the case, with the bicuspides, of the upper jaw especially, (a class of teeth the double actioned lever, is peculiarly well adapted to remove,) the former can exert but little power over it, for perpendicular extraction is here alone indicated from the peculiar formation of the root and its position in the jaw, and extraction in any other direction must inevitably cause a fracture of the alveolus, either externally or internally, accordingly as the force is applied.

The use of the ring, which is made of different sizes, to enable the levers to adapt themselves to teeth of any dimensions, is to confine their actions, and afford a fulcrum for each of them to rest on, and while it prevents the possibility of accident occurring from slipping, it again permits them to act in consent with each other, while raising the stump, which it is evident to the most cursory observer, must be in a true vertical line, the fang being forced up above the ring, through the space left between the opposing points of the levers, which can only take place when the handles arrive at a horizontal plane with each other. The method of using the double lever, is almost too simple to need description. The operator, after examining the situation and extent of the tooth, selects from several different sized rings the one most suitable to his purpose, due care being taken that the breadth of the tooth shall not be greater than the space between the prongs of the levers when brought in opposition, the elevators now attached to the ring (one being larger than the other according to the side of the mouth) he applies the instrument over the part and then gently insinuates the point of the left hand one, low down between the gum and the tooth, and proceeds in like manner with the right; when the tooth is thus fixed he gradually depresses tooth handles at one and the same time, observing to keep up a steady uniform pressure on the tooth, with the two points of the instrument, when the stump is immediately raised and freed from the socket by the time the handles are on a plane with each other; and I feel confident it is done as much to the advantage of the patient, as it is to the satisfaction of the operator.

To prevent injury to the contiguous teeth, on which the ring sometimes presses, it may be well to secure by ligatures a small slip of India rubber or soft cork, but I have seldom found this precaution necessary.

Explanation of the Drawing.

No. 1. The double lever fixed on a decayed tooth, previous to raising it.

No. 2. Position of the double lever after depression, and situation of the tooth between the opposing points of the levers.

No. 3. The smallest sized ring, suited for small fangs and fragments of teeth.

No. 4. A larger sized ring.

No. 5. A still larger ring and the one most commonly required.

G. Evans. *Surgeon.*

SELECTIONS.

CLINICAL OBSERVATIONS ON VARIOUS DISEASES,

By Mr. Wardrop.

FRACTURES OF LONG BONES.

Cases illustrating a Simple Mode of Treating Fractured Bones.

The subsequent cases are intended to shew that splints, bandages, and the complicated mechanical contrivances usually employed in the treatment of fractures of the thigh bone, are not necessary in all cases, and may sometimes be altogether dispensed with.

Case 1.—An officer, upwards of sixty years of age, when rashly crossing a street in the dark, was knocked down by the pole of a carriage. He was removed to a

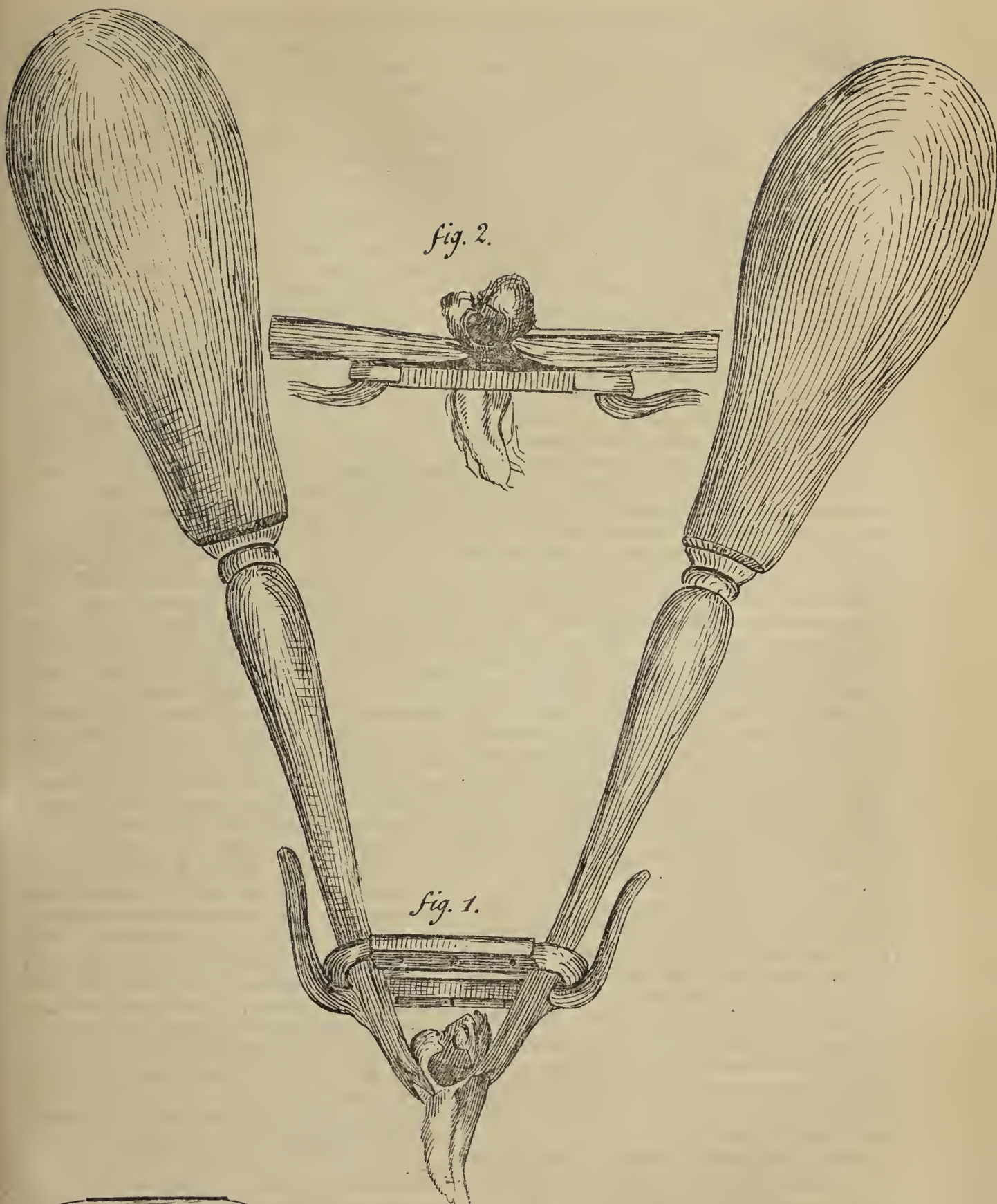

fig. 2.

fig. 1.

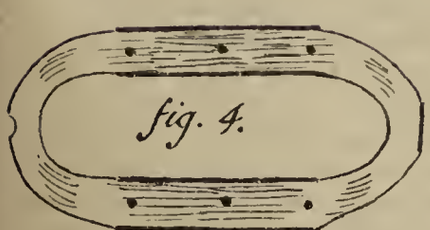

fig. 4.

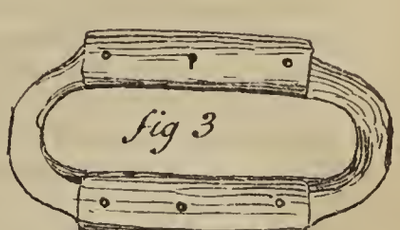

fig 3

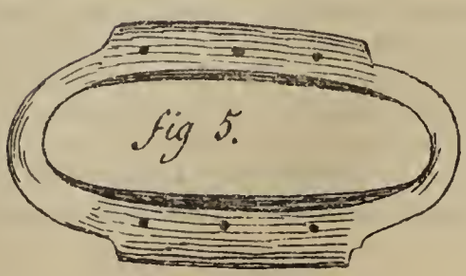

fig 5.

neighbouring hotel, where I visited him, and on examination found that the thigh-bone was broken a little below the trochanter. Being placed in the recumbent posture on his back, and on a firmly-stuffed sofa, he readily found an easy position; the limb was extended, being placed in a natural attitude, and the vacuity below the joint of the knee was filled with dossils of tow. The limb being thus in a state of complete repose, I thought that as it was late at night, and as the patient was perfectly easy, little harm could arise from his remaining until morning without the application of the usual splints and bandages.

On the following day the limb had retained its position so accurately, and the patient had so much dread of moving it, that after a little reflection I determined to leave it alone, and not to apply any splint or bandage, but to wait until I could perceive the necessity for employing such mechanical means to keep the fractured ends of the bone in a state of rest.

A few days after the accident, the patient, who happened to be an officer in the Indian army, was visited by his military surgeon, who, finding him without any apparatus on his fractured limb, very strongly expressed his entire approbation of the plan of treatment I had adopted, adding, that during a long residence and an extensive practice in the East, he had always been in the habit of placing soldiers who had fractured limbs simply on the floor, without splints, where they were allowed to remain until the broken bone had united.

This remark gave me confidence in the plan I had hitherto pursued with this patient, and during the whole progress of the reunion and consolidation of the thigh-bone, it was never necessary to apply any splint or bandage. When he paid me a visit about twelve months afterwards, I had the satisfaction to find the reunion of the bone so accurate, that in walking not the least limp or disparity in the length of the two limbs was perceptible.

Case 2.—A youth, whilst at play on a very unequal piece of ground, stumbled, and fell with such force as to break his left thigh-bone. Three days after the accident I visited him, and found him in one of Earle's beds, consisting of two inclined moveable planes, with splints applied to the thigh. The limb appeared shortened, and there was a good deal of swelling and tension, with very considerable pain, which induced me to suggest the propriety of placing him in a level and firm bed, and to remove altogether the splint and bandages. This was accordingly done, not without pain, but his limb had been placed in this new position, without the bandages and splints, scarcely a few minutes, when he expressed greater ease than he had felt since the accident. The limb now appeared of its proper length, dossils of tow being put under the knee; he remained in this position without the smallest disposition to move, until about a fortnight after, when Mr. Baines, surgeon at Barnet, under whose care the youth was, applied a splint as a means of security, and he afterwards wrote to me:

"It will gratify you much to know, that on the length of the limbs being compared, no shortening appears, and I trust there will be no deformity whatever from the fracture. This termination gives great satisfaction to many parties, and particularly to myself." About twelve months after the accident his brother called on me, and stated that the cure was complete, and that no disparity could be perceived in the length of the two limbs.

Case 3.—Mr. Braine attended a female in the sixty-sixth year of her age, who had the thigh-bone fractured near the trochanter from falling down-stairs. He found her in bed, and so easy, that on proposing to apply a bandage and splints, she insisted upon not being moved, as she suffered no pain, and the limb was in an unexceptionable position. No inflammatory symptoms or fever supervened, and the limb, without any mechanical means, continued in the same position, until union took place, which in seven weeks was so complete as to enable her to walk.

Remarks.—The injurious effects which are produced by the use of splints and bandages in the treatment of fractured bones, may frequently be observed, and I am convinced that in many cases and under many circumstances they may be well dispensed with. That such mechanical means are not always necessary, is indeed proved by the accurate manner in which the broken bones of animals frequently unite.

While splints may no doubt be often employed, at least without mischief, there are, on the other hand, cases wherein they are decidedly hurtful; I allude to those in which the soft parts adjacent to the fracture are so injured or bruised that the pressure of bandages or other apparatus becomes a source of irritation, and thus creates more or less inflammation, which, instead of promoting the reunion of the fractured bone, retards that process, and I have known extensive suppuration take place in the soft parts, even from this cause alone.

In fractures of the lower limbs I would therefore strongly urge surgeons to con-

sider in what cases or under what circumstances splints and bandages are requisite,—in what cases they are hurtful,—and when their application is nugatory. If they are not decidedly necessary, or *considered* improper, it is of great importance to attend to the kind of bed on which patients with fracture are to be placed, taking especial care that it is one plane surface, covered by a firm and equally stuffed mattrass. Indeed, when there is any difficulty in getting a fit bed, it answers perfectly well to place a mattrass or several folds of blanket on the floor of the apartment. Should the broken limb be placed in the position which gives least pain, and the broken extremities be in exact apposition, as in the cases which I have detailed, but slight means will be found requisite to keep the limb steadily in the same place. The pain which the least motion creates is quite sufficient to guard the patient from making the attempt to move it, and nothing more is requisite than placing a dossil of tow to fill up any inequalities, such as that in the ham or at the heel, preventing the smallest exertion or muscular action being made by the patient to support the limb, and thus allowing the fractured member to be in a perfectly quiescent state.

This simple mode of managing a fractured limb has also the advantage of admitting the ready employment of leeches, or such other local applications as may be requisite to subdue any inflammation at the seat of injury. When, indeed, the soft parts around the fracture are painful and swollen, it will be found an excellent general rule to apply leeches and poultices, in number and frequence proportionate to the degree of violence of the symptoms; and when the concomitant injury has been such as to create a general febrile excitement, then general blood-letting should be unhesitatingly adopted.—*Lancet, Oct.* 1834.

Note.—Of the advantages of this mode of treating fractures of the thigh, we can speak from experience; a case having occurred in our own practice where we used neither splints nor bandage of any kind, and we never saw a better cure.—*Eds. Ind. Jour. Med. Sc.*

Observations on Irritable Uterus.

Dr. Gooch, in his excellent "Account of some of the most important Diseases of Women," has given a very interesting description of a disease which he denominates the irritable uterus; a painful and tender state of that organ, neither attended by, nor tending to produce, change in its structure.

He considered it at first to be chronic inflammation which would end in disorganization probably of a malignant kind. But experience, which taught him that it was a very intractable disease, taught him also that it was not a disorganizing one; for he states that he has known cases which lasted upwards of ten years, in which the structure of the uterus remained unaltered. The symptoms are stated to be, pain in the lowest part of the abdomen, along the brim of the pelvis, often also in the loins. The pain is aggravated by the erect posture; but the recumbent position alleviates, but does not remove the pain, which is always present more or less. The paroxysm generally comes on a few days before menstruation, or, as in many cases, a few days afterwards, but it occurs at this and at other times, though the patient has been recumbent for a long time. On examination, the neck of the uterus is found to be exquisitely tender, and slightly swollen, but this symptom, as well as the degree of pain felt on touch, varies at different times. The menstruation often continues regular, but sometimes it is diminished, or ceases altogether. There is little general disturbance of the system. To embody the symptoms in one view, "let," says Dr. Gooch, "the reader fancy to himself a young or middle-aged woman somewhat reduced in flesh and health, almost living on the sofa for months, and even years, from a constant pain in the uterus, which renders her unable to sit up and take exercise."

Dr. Gooch states that he always found it a most intractable disease, very slow in the progress of recovery; and no disease is more liable to relapse. He mentions that Dr. Baillie had known one patient who had laboured under it for thirty years.

The treatment which Dr. Gooch proposes is total repose, local blood-letting by leeches and cupping, and, if the constitution participates in the affection, bleeding from the arm; but this he was cautious about; narcotics to relieve the pain, and gentle laxatives, the warm or steam-bath, or hip-bath. Should these means fail, a gentle course of mercury and external irritation were recommended. The practitioner can do no harm, he says, and must do good as long as he confines himself to the recumbent position, warm hip-bath, and unirritating aperients; but with blood-letting and mercury he must be more cautious. The result of Dr. Gooch's experience is not very satisfactory, as in almost all his cases the recovery was slow, and in some the disease was only alleviated.

As to the nature of the disease, he considers it neither as acute nor chronic inflammation, as it does not alter the structure of the organs. He regards it as something of a nervous affection, resembling a state which other organs are subject to, and which in them is considered as irritation, resembling

what surgeons call an irritable tumour of the female breast.

I have been more particular in stating Dr. Gooch's opinions, as he was the only English author when he wrote who had described this affection, and because, with all due respect for that excellent author's talents and opportunities, I have been led to differ somewhat from his view of this affection. Of the accuracy of his description there can be no doubt; but from what I have seen, and especially from one case of peculiar severity which has been under my charge for some years, I am inclined to think that Dr. Gooch insists too much on its nervous character. The treatment found effectual in his hands was local blood-letting and antiphlogistic remedies; but, by considering it as irritation rather than inflammation, too much room may be given for dilatory and vacillating practice.

The case alluded to is the following. A newly married lady had suffered from irregular and scanty menstruation, with slight leucorrhœal discharge for some months, when I was consulted regarding her health. The symptoms were attributed to a stumble when going down stairs, which was followed by a flow of blood from the parts. She was of a full habit of body, and had previously enjoyed good health. Leeches were repeatedly applied to the ankles; pediluvia, warm hip-bath, mild laxatives, and low diet, were recommended. Little or no benefit was derived from this treatment for some months. A few days before a menstrual period she was seized with intense pain in the uterine region, so severe as to occasion constant agitation and restlessness. The pulse was little affected. On examination, the neck of the uterus appeared quite healthy, perhaps a little longer than usual, and gave a sensation of increased heat and turgescence. The examination did not increase the pain, but she said it was already so great that nothing could add to it.

She was cupped on the sacrum, and leeches applied to the groins and labia with little relief. I may mention, that, from a peculiarity of skin, very little blood flowed from the leech-bites, and it was even difficult to obtain a sufficient quantity of blood by cupping. An examination was made by an eminent accoucheur, who could discover no trace of disease. The paroxysm continued for two days and then subsided. On its recurrence another physician was consulted, and we agreed as to the plan to be followed, which was absolute rest in the recumbent position, occasional cupping, and the application of leeches to the labia every fourth or fifth day, low diet, and opiate and emollient injections. This was persevered in for some time, but the paroxysms continued as severe as ever.

The menstrual discharge was scanty, and generally preceded by a brownish fluid. The paroxysms of pain were sometimes previous to, at others after, the menstrual period. They usually lasted three days, and although they remitted during the day, they continued very severe all night. The expression of pain was as severe as I ever recollect of witnessing. She complained of a hot, burning, searing feeling in the passage, — a feeling as if something hard was pushing against the womb. There was sometimes bearing down, at others a sensation as if something were tearing the diseased parts asunder. The severe fit usually terminated by a discharge of bloody fluid.

Blood was several times drawn from the arm, but without any effect. Blisters were applied, and a seton inserted in the back. The vapour-bath was also tried; but the only relief that could be obtained was from large doses of muriate of morphia, which induced a kind of stupefaction. The other preparations of opium were tried, but the muriate was found to answer best. *Stramonium, conium,* and *hyoscyamus* were also given; but we were usually forced to return to the morphia. After the subsidence of a severe paroxysm, pain still continued, but with less intensity. There would probably be severe pain for some hours in the morning, when it would subside and return again towards night. It was always increased by the erect posture. Mercury was given so as to affect the mouth, and the effect kept up for six weeks; in fact, every thing that Dr. Gooch has recommended was had recourse to, and submitted to with admirable perseverance by the sufferer. Copaiba, cantharides, &c. were tried at different times. Dysuria also came on to a great extent, with pain in the bladder, which led to an examination of that organ, but without result. There was now occasional leucorrhœal discharge, which was sometimes yellow, sometimes colourless, and sometimes dark-coloured. An eminent physician occasionally saw her; but all our efforts failed in producing any alleviation.

The disease had now continued more than two years and a half, during which time she had been confined to the recumbent position, and lived in a state of extreme suffering. There was some emaciation but not great, but there was a delicacy of complexion. She complained of blindness, with dilated pupil, and some nervous symptoms, which threatened eventual serious consequences.

It was now deemed expedient, for the recovery of the patient, to employ the speculum. The uterus was of its natural size, but the vaginal covering of the neck and the vagina surrounding it, was of an intense red,

while coloured mucus was observed flowing from the *os uteri*. Portions of the vagina were also of colours varying from brownish-black to bright red, rather in lines and patches than continuous, very much resembling inflammation of the mucous membrane of the intestines. On one part there was a patch of superficial ulceration or rather abrasion surrounding the urethra; it appeared as if the external covering had been removed, and it was surrounded by minute vegetations.

In this state of the uterus and vagina, I conceived it proper to recommend depletion as direct as possible from the parts; and leeches to the number of ten were accordingly applied to the uterus and vagina. They gave no pain, filled themselves in a few minutes, and the discharge of blood was copious. This was followed by great abatement of pain. The leeches were repeatedly applied at intervals of a week, or even shorter periods, whenever the pain threatened to return. From eight or ten were usually applied at once. The number of times they were had recourse to, I cannot precisely state, but certainly more than a dozen times; and each application was made according as the symptoms seemed to require it. Lunar caustic was repeatedly applied to the ulcers. The dysuria still continued with pain in the bladder for two or three hours in the morning; but it yielded on giving ten drops of the tincture of muriated iron every ten minutes till relief was obtained. It seldom required more than three doses, and so well-marked were the effects, that, when not given, the pain and inclination to pass urine continued for two or three hours; when given, it yielded in twenty or thirty minutes.

In conclusion, the pain disappeared, and the patient was sent to the country, where she recruited gradually. The menstrual discharge returned, but is still rather scanty. There has been no return of pain, and she is now able to move about and take moderate exercise.

Since the above was written, I observe that Dr. Davies, in the seventeenth number of his Principles and Practice of Obstetric Medicine, has taken a similar view of Dr. Gooch's irritable uterus to what I have done, and has related two cases which he treated on a similar plan to that I followed. Dr. Davies' cases were not so severe as the one here related, but they confirm the opinion that inflammation, or at least vascular fulness, ought to be suspected in the treatment of this severe affection.

The practical conclusions I would draw are, that the state of the lining membrane should always be kept in view; that, as long as the pain continues, and the strength remains unimpaired, we should never despond, but persist in employing remedial means, and that the detraction of blood from the uterus itself should be had recourse to when other means fail.—*Dr John Scott in Edin. Med. Surg. Jour. Oct.* 1834.

CASE OF SPONTANEOUS LUXATION OF THE VERTEBRA DENTATA.

By William Thomson, M. D. Fellow of the Royal Colleges of Physicians and Surgeons, Edinburgh.

By the kind permission of Drs. Burt, and Hay, I had an opportunity of being present, in the course of last summer, at the inspection of the body of a patient of theirs, who died very suddenly and unexpectedly, and in whom death appeared to have been produced by a spontaneous dislocation of the *vertebra dentata*, not accountable for by any symptoms of disease observed during life; nor by any traces of morbid alteration of structure in the bones, articulating cartilages, or connecting ligaments, that could be detected on examination after death. Agreeably to their wish, I have now the honour of submitting a brief statement of the particulars of this case to the Society,—a task which I have undertaken the more readily, that, from conversation with professional friends, as well as from an examination of those works in which similar cases might be expected to be met with, I am led to believe it to be one of extremely rare occurrence.

Mr. P. B., the subject of this case, was about 60 years of age, and enjoyed, in general, a good condition of health. For some years before his death he was subject to attacks of sore throat, which were occasionally of a severe character, terminating in the formation of large abscesses. Immediately before his death he had experienced a somewhat severe attack of cold; but from this he had so far recovered, that, with the consent of his medical attendants, he was to have driven in a carriage a few miles out of town on the day on which he died.

On the morning of that day, when Dr. Burt called about nine o'clock to make his ordinary visit, he was informed, that as, contrary to custom, Mr. B. had not yet rung his bell, it was supposed that he was indulging in a longer sleep than usual. On approaching the bed, after opening the window-shutters, Dr. Burt was very soon convinced that his patient was a lifeless corpse. He was lying upon his back, very far up in bed, with his head thrown very much backwards, and hanging over, so as to be almost behind, the pillow. His countenance was very pale, and, from the temperature of the body, Dr. Burt was disposed to believe he could

not have been dead for more than two hours. Nothing, however, could be discovered, justifying an opinion at what particular time, or in what particular manner, death had occurred.

The attempt to ascertain by dissection the cause of death in this case was commenced by the examination of the thoracic *viscera*, but no appearances could be detected in the heart or large vessels connected with it, or in the lungs, capable of furnishing the slightest explanation of this sudden and unexpected occurrence. It was remarked, however, that the whole of the blood in the body was in a fluid state, affording, as we conceived, a presumption that death had been instantaneous. The contents of the abdomen, including its large vessels, being also found in a healthy condition, it was resolved to open the *cranium*.

The whole of the *encephalon* was minutely examined without any appearance of disease being discovered in it, and we were about to relinquish all hopes of detecting the cause of death in any organic lesion, when a round knob was observed projecting into the *foramen magnum*, at the posterior margin of the basilar process of the occipital bone. At first this knob was supposed to be a tumour growing out of the basilar process, with which it appeared to be in continuity, but on accurate examination, by rotating the head whilst this knob was grasped by the fingers, it was found to be the *processus dentatus* of the second cervical *vertebra*. As examined through the *foramen magnum*, no mark of disease could be discovered, either in the process itself, in its ligamentous coverings, or in the adjacent *vertebræ;* and no laceration of the coverings, or of the substance of the spinal chord, had been produced by it.

We have to regret that the length to which our examination had already been carried, and the impossibility of bringing the parts into view without mangling the body to a degree which we were not warranted in doing, prevented us from ascertaining the exact state of the *vertebræ* and their ligaments; but, by dissecting from the *nucha* round the *vertebræ*, we were unable to detect any swelling or other traces of inflammatory action either in the bones, or in their connecting cartilages and ligaments.

Neither Mr. B.'s medical attendants nor his relations had ever heard him make the slightest allusion to any pain or uneasiness in the region of the neck, and the only circumstance which occurred to them as bearing in the most distant degree, on the supposition of disease existing in this region, was a habit he had of occasionally twitching his head to a side, as if to relieve himself from some tightness of his shirt collar or neckcloth.

In my father's Surgical Notes I find it mentioned, that "Mr. Cruikshank, when treating of the spine, shows a dislocation of the *dentata*, which occurred in a woman from a sudden motion, and which was followed by sudden death;" and I find the following fuller, though still incomplete, account of the same case, in an abstract of a selection from an unpublished volume of Anatomical Reports, by the late respected anatomist Mr. Wilson of London, published in the London Medical Gazette, Vol. iii. 1828-29.*

Luxation of the Dentata."—Mr. Wilson assisted Mr. Cruikshank in examining the body of a woman, aged 30, who had lain-in about a month before. She had been heard suckling her child at one o'clock in the morning; at four she was found dead. The viscera of the abdomen, thorax, and head, were carefully examined, without finding any thing to account for her death; when, as they were returning the brain into the skull, Mr. Wilson noticed a considerable projection on the fore-part of the *foramen magnum*. On examination, this was found to be the denticular process of the dentata luxated backwards, and which had produced a degree of pressure on the spinal marrow sufficient to destroy life."

This is the only case I have been able to find recorded that corresponds in its nature to that which I have now submitted to the Society, that is, a case of luxation of one of the superior cervical *vertebræ*, independently of external violence, or of the previous existence of well-marked symptoms of disease. Indeed, I am the more induced to believe that this is an extremely rare occurrence, from finding that no allusion is made to it in a very learned inaugural dissertation written expressly on the subject of Spontaneous Luxation of the *Atlas* and *Epistropheus*, by Dr. Schupke, a pupil of the celebrated Professor Rust. All the instances of the spontaneous luxation of these *vertebræ* referred to by Schupke, depended on the effects of inflammatory action, evident symptoms of which had manifested themselves during life.—*Edin. Med. and Surg. Jour. Oct.* 1834.

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* Since the above communication was laid before the Society, I have, by the kindness of Dr. J. A. Wilson, had an opportunity of reading Mr. Cruikskank's case as detailed in the MS. volume above referred to, and have been enabled by the restoration of a few words, to render the following statement of it somewhat more precise.

WOUND OF THE HEART, THE PATIENT SURVIVING TEN DAYS.

A robust young man, æt. 26, in a quarrel with his brother, received a stab of a knife from the latter, it penetrated the left side of the chest below the mamma. The instant he received the stab, a considerable gush of of blood took place from the wound; the countenance became pale; cold sweat covered his forehead, after which he had several fainting fits. The physicians who soon after visited him, made the following report: paleness of the countenance; pulse weak, and occasionally intermittent, slight oppression and difficulty of breathing; intense pain in the wound, from which trickled some drops of blood: the intellectual faculties free and unimpaired. The patient found himself getting better daily, until the morning of the tenth day, when he fell into a faint, during which he died. On examination after death, the wound was found to have penetrated the left ventricle of the heart, the knife had even struck the opposite wall of the ventricle. Death ensued from an effusion of blood into the cavity of the thorax. There had formed in the cavity of the wounded ventricle, a clot which had closed the wound of the heart, and prevented the discharge of blood, and it was owing to this latter circumstance that the patient survived so long.—*Rev. Medicale*, July, 1834.—*Dub. Jour. Med. & Chem. Sc. Nov.* 1834.

ADMISSION OF AIR INTO THE VEINS DURING OPERATION.

Case I. Mr. William Burrill, of Salem, aged sixty, was admitted into the Massachusetts General Hospital, on the 16th October, 1830. He had a cancerous affection of the left side of the face and neck, of the extent of three or four inches diameter. It was hard at the edges, of a livid red colour, ulcerated in the centre, very offensive, very painful, and had made an impression on the general health. The parotid gland, the submaxillary, the sublingual, and all the textures, excepting the bone, were involved in the complaint. The lower jaw was thought to be diseased, at first, but it afterwards appeared not to be so. In so bad a state of things, there seemed to be little hope of eradicating the disease, and the operation would not have been attempted, had not the patient solicited it.

Considering the extent of the disease; that important blood-vessels would be divided, namely, the facial and sublingual arteries, probably the temporal, and possibly the external carotid; it was thought best to secure the carotid trunk. An incision, for this purpose, was begun opposite the thyroid cartilage, and carried two inches downwards. The platysma muscle was divided, the edge of the mastoid exposed and dissected. Thus far, only a few drops of blood were discharged. The face of the sheath of the great vessels was a little uncovered, when a small effusion of venous blood appeared under the knife, and checked the operation. At that instant a very distinct sound was heard, like the passage of air through water. A few bubbles were seen in the venous blood, the flow of which was immediately arrested by applying a finger on the part. The patient exclaimed, "I am faint." On regarding his countenance, it was not pale, but livid, almost black, and the muscles agitated by a convulsive motion. The respiration became deep, laboured, and stertorous, like that of apoplexy. The pulse being examined at the wrist, was found distinct, but very slow. The wound not bleeding, and very little blood having been lost, the temporal artery was opened, and the blood flowed from it with great freedom. As it flowed, the respiration became more frequent and less laborious, the pulse at the wrist more natural. The leaden colour in the cheeks assumed a reddish tinge, and the alarming character of the symptoms was evidently diminished. About twenty minutes elapsed during these changes. At the end of half an hour, it was thought safe to remove the patient to his bed, where he lay in a state of insensibility for two hours, at the expiration of which he awaked as from sleep, still breathing like an apoplectic. The night was passed without any accident, and on the following morning he was as well as usual, with the exception of a moderate soreness over the thorax, and a headach.

In seven days after the accident described above, the operation was performed without tying the carotid artery.

The diseased parts were surrounded in an elliptical incision, extending from the lobe of the ear to the upper part of the neck, and including the submaxillary, the sublingual and parotid glands, all of them in a morbid and disorganized state, and they were all entirely removed. The hæmorrhage was copious, but readily arrested, with the exception of that from a large vein, which from its depth, under the jaw, could not be distinguished so as to admit the application of a ligature, and was, therefore, compressed by a sponge. The veins below the wound were compressed during this operation. The patient experienced a slight faintness, which soon passed off. He had no bad symptoms; and on the 10th of December, the wound being nearly healed, he requested his discharge, which was granted.

Case II.—Nancy Bunker, of Trenton, of Maine, married, her age thirty-three. Three

years since, she noticed a hardness in the right breast, which increased till it involved the whole gland in a tumour, very hard, moveable, yet connected with the pectoral muscle by a morbid adhesion. The nipple is drawn in. The axilla is occupied by a considerable tumour, of a globular form, and quite hard. An operation was performed on the 24th December, 1831.

The patient sat in a chair. The right arm was extended, raised above a horizontal line, in order to give tension to the skin, and permit access to the arm-pit, and was supported in this position by an assistant. The skin on the surface of the breast, with the diseased nipple, were included in an oval incision; the breast was dissected from the pectoral muscle, and left connected with the axillary glands while the extirpation of these glands was effected. As they adhered to the great axillary vessels, they were cautiously detached by dissection, and by insinuating the finger, where the cellular substance was loose, between the tumour and the great vein. This separation was nearly effected, only a slight connexion still existing at either extremity of the tumour. Proceeding to separate it, at the outer part of the axilla, a vein was divided, and a small quantity of venous blood discharged. Scarcely was this done, when the patient struggled, her complexion changed to a livid colour, and at the same instant the bubbling or clucking noise, which had not been noticed before, was heard, though indistinctly; but the place from which it issued was not visible, the surrounding skin and fat lying over it. On this, the axilla was immediately compressed. The patient became insensible, breathing as in apoplexy. The tumour was at once separated. The posture of the patient was changed, and she was supported by those around. Some brandy was poured down the throat, and ammonia introduced into the nostrils. The pulse, however, became less distinct every instant. Cloths dipped in hot water were thrown over the extremities. Strong frictions were applied to the chest, and to all parts of the body. Considerable qnantities of brandy were again poured down the throat. At this moment the livid colour of the cheeks gave place to a suffusion of vermilion red, and no glow in the cheek of a youthful beauty ever gave one so much pleasure as that flush. But the flush soon passed off; the lividness reappeared; the respiration became more feeble; pulse at the wrist scarcly perceptible; and, notwithstanding the redoubled applications of external heat and moisture, the extremities and the whole body cooled rapidly, and presently the respiration ceased.

As a last effort, the larynx was opened, and the inflation of the lungs by a bellows was put in operation in a speedy and perfect manner, imitating the movements of inspiration and expiration with great exactness, continuing at the same time the general application of heat and frictions to the whole surface. These measures were employed for about twenty minutes longer. At the end of this time, there was no remaining hope of the restoration of the patient to life. The friends being anxious to take advantage of a vessel then sailing for their home, the body was soon after removed, and no opportunity afforded for examination.—*Dr. Warren in the Cyclopœdia of Practical Medicine and Surgery, a Digest of Medical Literature, edited by Dr. Hays.—Dub. Jour.*

CAUTION TO EXPERIMENTERS WITH THE ELECTRICAL KITE,

By Mr. Sturgeon.

On Friday last, about half-past two in the afternoon, clouds began to form in various quarters of the heavens in rapid succession, from mere specks or streaks to immense groups, with every appearance of being highly electrical.

I repaired to the Artillery Barrack grounds with an electric kite, and in a very short time got it afloat, letting out string through the hands from a coil or clue which was thrown on the ground. When about a hundred yards of the string had been let out, a tremendous discharge took place, which gave me such a blow in the chest and legs that I became completely stunned, let go the string, and consequently the kite soon fell.

The accident was owing entirely to my own neglect, and could not posssibly have happened had I taken the following precaution.

Let all the string intended to be employed be first taken off the reel or coil, and stretched on the ground. Let now the insulating cord, riband, glass, or whatever is used for this purpose, be attached to the kite-string and fastened to a peg, tree, or any thing intended to hold the kite during the time it is up. Next fasten the kite to the other end of the string, and let it ascend from the hand.

This is the manner in which I usually proceed when heavy clouds are hovering about, and ought always to be attended to, although I neglected it on this occasion. The experimenter by this means is completely out of danger; and he may easily ascertain if the string be highly charged by going to the other end, because of the brushes of light, and noise attending them.

I find it convenient to have a sliding copper wire on the silken cord, which can be moved, by means of a long glass rod,

to any required distance from the wired string, the other end being stuck fast in the ground. If the electric fire strikes two inches over the dry silken cord, (and it will sometimes strike a yard,) it would not be safe to approach it; and no man could hold the string when it strikes over one inch of the silk, or, which is the same thing, through the air.

After the electrical state of the string has been ascertained, the wire may be slided away from it as far as possible (the silk ought never to be less than two yards long). The other end is then to be taken out of the ground and attached to the apparatus for experiment. The wire is again slided up to the wired string, and left there during the time the experiments are carrying on.

The only method of getting the kite down during an intense electrization of the string, with safety to the experimenter, is to unfasten the silken cord from its hold and let all go: the kite falls. I have frequently been annoyed, whilst holding the kite-string during hot hazy days when no cloud was visible, by a rapid succession of discharges, from which I had no other means of escape than by quitting the string and letting the kite fall. The same thing sometimes happens in cold dense fogs in the winter. I have experienced these rattling or tremulous shocks when the kite has not been more than thirty yards from the ground, and the wired string at the same time touching it. Hence great quantities of the fluid must necessarily pass into the ground directly through the wire, in addition to that which produced the shocks.

The publication of these particulars may possibly prevent some unexperienced electrician from receiving a death-blow from this kite string.

Young persons who are fond of kite-flying should also be cautious not to have their kites up during thunder storms, as it is possible that a wet string may transmit a violent discharge, from which a serious accident might occur.—*Ibid.—Dub. Jour. Med. and Chem. Sc. Nov.* 1834.

RABIES NOT COMMUNICABLE BY BITTEN ANIMALS; WITH REMARKS ON THE DIFFERENCE BETWEEN THE CONTAGION OF RABIES AND OTHER DISEASES.

By M. Augustin Capello, of Rome.

In the *Archives Générales des Médecine*, July, 1834, there is an analysis of two treatises on rabies by the above-named gentleman, in which he maintains that rabies, after its first transmission from one animal to another (and without an exception so far as the genus *canis* is concerned), loses its venomous property, ceases to be a contagious disease, and cannot be farther communicated. He produces several facts in supposed confirmation of this.

Case 1.—In the district of Caserano, near Tivoli, a dog, affected with *spontaneous rabies,* bit a young man named Dominique Giaco, 24 years old. A few drops of blood escaped from the wound, which healed, and he seemed to be in perfect health. An ox had been bitten at the same time, and the dog was lost sight of. Three days after the bite, the ox exhibited symptoms of rabies; he bit several animals of his own and other species, and was at length shot. None of the animals bitten by the ox became rabid. The disease of the ox so alarmed the young man, who had been bitten at the same time, that, notwithstanding he seemed to be in good health, he determined to submit to a course of treatment. Twelve leeches were applied to the part, and lotions of hydrochloric acid were applied four times in the day, according to the method of Wendelstadt. The actual cautery was also applied, which enlarged the wound to such an extent that it did not afterwards heal. Four months passed, and it was thought that all danger was over, when he became melancholy, and was continually weeping. Hydrophobia was manifested, and reached its height in spite of every treatment. In this miserable state he was taken to the hospital, but there the symptoms became more aggravated; the patient longed for death: all treatment was vain. The unhappy man died five months after the bite. The dead body, which was opened on the same day, had already begun to be decomposed. There were here and there livid spots on the skin; the cerebral vessels were engorged; the laryngo-pharyngeal passages were of a brown-black colour. Through the whole length of the œsophagus, and on the membrane of the stomach and of the intestinal canal, black spots were observed. The liver was enlarged, the bile black, and emitting a fetid odour. The pericardium did not contain any serosity, and the heart was diminished in size; the organs of generation were swelled and livid; and the blood, twelve pounds of which had been abstracted, did not coagulate. A little dog was inoculated with the saliva, was shut up, but set at liberty again at the end of eight months, having exhibited *no symptom of rabies.*

Case 2.—The dog of a shepherd was affected with *spontaneous rabies.* Before he was destroyed a certain quantity of saliva was taken, and a cat, and the little dog which was the subject of the experiment in Case 1, were inoculated with it. On the sixth day after the inoculation, the dog had

lost his usual spirits, and began to refuse food and drink. On the eleventh day all the symptoms of rabies where developed; the dog had dread of liquids—fury—and frothy saliva was discharged from the mouth. The nervous excitation increased with great rapidity, and continued until his death, which took place on the fourteenth day after the inoculation.

Case 3.—Another little dog was inoculated with the saliva of this one, and a greater number of incisions were made than in the former case. After he had been shut up seven months, he was set at liberty, not having exhibited any symptom of rabies.

Case 4.—In the cat just spoken of, rabies developed itself thirty-four days after the inoculation, and such was the intensity of the disease, that she died on the second day. Another cat was inoculated with saliva from this one, and was shut up for six months, but no symptom of rabies presented itself.

Case 5.—In the month of March 1816, a dog *spontaneously rabid*, bit, at Tivoli, two other dogs. One of them was killed; the other attacked with all the symptoms of rabies, escaped through the streets, and bit three or four women, not one of whom was affected with rabies.

Case 6.—In the month of January 1818, M. Capuccini, returning from hunting, saw, near Lucana bridge, a dog with glistening eyes, and ferocious look, and foaming month, attack and bite his dog. M. Cappuccini immediately shot him, without suspecting that he was rabid. Thirty-eight days afterwards, the dog which was bitten lost his usual spirits, refused his food, had dread of water, ran into the street, and bit four dogs which he met. Every body fled at the sight of the enraged dog, except two children, which were also bitten. The dog disappeared, but it was afterwards found dead at the place where the disease first attacked him. It was ascertained, at the same time, that the dog of a gardener had become spontaneously rabid, and that it was the same dog which was killed at the bridge of Lucana. The masters of the four dogs which were bitten complained to M. Capuccini; but he assured them that, having been bitten by a dog in whom the disease was developed by communication, or in the second remove, they were perfectly safe. He gave the same assurance to the parents of the children, and his prognostic was completely verified.

Case 7.—M. Rosa had two dogs, one of a beautiful form, and the other very ugly; the latter, after refusing his food and water, and becoming dispirited, and trembling all over, escaped from the house never more to enter it; but before he ran away, he bit the other dog, and then directed his course towards Mount Ripoli, where some days afterwards he was found dead. After having ascertained that he had not been bitten by any other animal, and that, consequently, the rabies was *spontaneous*, M. Rosa was assured that his dog would become rapid. In fact, at the end of fifty-one days, he was attacked by all the symptoms of the malady, and although confined with some care, he broke his chains, bit a woman in the family and one of the domestics, and, in a street near Jesus Place, several women who were coming out of church; thence he directed his course towards Palais Communial Street, where he bit several times the dogs of Francois Giansante, and MM. Betti. He passed through Palatine Place, and directing his course towards Saint Valérie, he met M. de Angelis, whom he bit slightly on the back of the hand, leaving a quantity of spume on the wound: lastly, at Saint-Ange Gate, he bit an old woman and a little girl, and precipitated himself among the ruins of Quintilie Varo. Not one of these persons or animals became rabid.

Case 8.—A dog of M. Etienne Jani began, towards the end of May 1821, to lose his usual spirits, and would no longer remain with the servant, Seràphin Orsini, whose inseparable companion he had been. On the morning of the 29th he had scarcely gone out of the house, before he flew on a dog of Madeleine Romani, which, although strong, and unprovokedly attacked, did not defend himself. The domestic spoke to him sternly, and made him return to the house. The symptoms of rabies increased. On the morrow the dog did not refuse the food which the servant threw to him, but escaped from the house, and the more he was called after the faster he ran. The servant ran after him, overtook him at the Cathedral Place, and seized him by the neck. The dog turned, and bit him slightly on the left hand; nevertheless, he was carried back to the house, and the symptoms becoming more violent, he was killed and thrown into the river. Fifteen days after the bite the unhappy domestic began to be melancholy—he lost his natural sleep and his appetite, and his bowels were constipated. A purgative of jalap was forced upon him, and some draughts of hydrochloric acid. The bitten part was scarified, and the cupping-glasses were applied to it. These remedies not being efficacious, opium and musk were used; but the disease increased, and deglutition became impossible. There were no vesicles, nor any alteration of the frenum of the tongue or of the neighbouring parts. On the fifth day after the commencement of the disease, he died in horrible agony. Peculiar circumstances prevented the examination of the body.

This occurrence had produced great terror in the whole family, when, as the mother of M. Jani was walking in her room, a rabbit, with a great quantity of frothy saliva, bit her on the left leg, and left a slight mark. This rabbit afterwards ran into a neighbouring stable, and several times bit the hind legs of a horse : it then hid itself and died rabid. There were found on it two wounds, one of which was not healed. This rabbit had lived with the dog that had become rabid. Neither the mistress of the house nor the horse was affected with the disease.

Case 9 —The dog of Madeleine Romani had been first bitten, as was stated in case 8. The disease was not developed in him until two months after the death of the servant Orsini and the rabbit ; perhaps because he was bitten when the disease was in an early stage in the dog. One morning, early, this dog ran out of the house furious, and bit every thing that came before him. Several dogs and five persons were bitten, but neither the one nor the other ever exhibited any symptoms of rabies.

Dr. Capello concludes, from these cases, not only that rabies is not communicated beyond the second person affected, but that its nature is not contagious. " Contagious diseases," says he, "are reproduced many times—nay, almost to infinity, and everywhere ; but this is not the case with rabies. The former, either by means of a latent germ, or under atmospheric influence, appear and disappear at certain determined periods : rabies, on the contrary, knows nothing of these epochs, but develops itself at most irregular and uncertain times. Contagious affections, whether of the system generally, or affecting the integument alone, produce invariably some eruption or efflorescence, by means of which we can determine the true character of the disease ; rabies, on the other hand, is accompanied by no eruption or discoloration of the skin. They assume characters more or less intense, by reason of certain meteorological changes : rabies, on the contrary, pursues its undeviating course, whatever be the circumstances, the season, the climate, the weather. Contagious diseases gradually lose much of their intensity of character, and some of them have disappeared from the surface of the earth : rabies, from the moment it was first described to the present hour, has uniformly retained the same character. They, however fearful may be their character, spare a few of the individuals which they attack ; but rabies, whether spontaneous or communicated, is always mortal. Finally, contagious diseases propagate themselves with so much the more facility in proportion as they are fatal, and are transmitted not only by immediate contact but by very circuitous means; rabies, although uniformly fatal, is transmitted only through the medium of a solution of continuity.

" A difference so marked," adds the author, " makes me more and more doubt the contagiousness of rabies. *Rabies canina* seems to me to form *the intermediate link which unites the chain of contagions with that of poisons*, properly so called. I made these reflections when, after more than forty days, out of the numerous animals that had, in the month of March 1811, been bitten by the ox described in the first case, not one of them had become rabid. I thought of those persons who, without presenting us with any convincing reasons, affirmed that rabies could not be communicated by herbivorous animals, and I felt that the arguments furnished by analogy were utterly contrary to this assertion ; for, besides the anthrax of the tongue, and other contagious maladies of herbivorous animals, we had happily discovered the pustule on the teat, which not only could be propagated from the cow, by inoculation, to every other species of animals, but was a preservative in the human being against that destructive scourge the small pox. In the month of April, in the same year, I happened to see the number for August 1810 of the *Medico-Chirurgico Journal* of Alexander Flajani, and the train of thought which had passed through my mind received much confirmation. There was an article in that journal in which besides some cases related by Professor Rossi, of Turin, on this subject, I found the following case, related by Professor Bader. He had a rabid dog, which bit several others. They became rabid, but they did not communicate the disease to the animals bitten by them. This isolated fact, added the editor, is not sufficient to prove demonstratively the opinion of M. Bader, that rabies cannot be communicated beyond the first inoculation. This very proper reflection kept me for awhile in a state of incertitude ; but I was at length, fully convinced by the cases which I saw in 1813, 16, 18, 20, and 21."

" Does any one ask *how it happens that spontaneous rabies should be so contagious, and communicated rabies not contagious at all, when the symptoms of the one and the other are precisely the same?* I can only answer, that the science of medicine consists of series of facts, and that the cases which I have described are facts. I might, indeed, add, that when we attentively consider the physiological and pathological state of organized and living beings, there are many obscure questions, the mystery surrounding

which the most ingenious men have not been able to disperse.

"If I may be permitted to advance an opinion, I think that there is one peculiar cause of the development of spontaneous rabies; and this cause certainly does not exist in those that have acquired the disease by communication. The symptoms of hydrophobia from a moral cause, and also those of sympathetic hydrophobia, do they not resemble—simulate—those of essential rabies, and yet they belong not to an affection which is virulent and contagious in its nature? But the symptoms of spontaneous rabies are *not identical*, at least *in degree*, with those that characterize the communicated disease. I have constantly observed, that the disobedience to command, the fury, the avoidance of society, which are precursor symptoms of the malady, are more intense, and more quickly appear in those that are affected with spontaneous rabies. The cases which I have reported prove this. It is rarely that dogs affected with spontaneous rabies are seen in inhabited places; when they become diseased, they search out for caverns and the most secret recesses."

The author concludes his first memoir, with making some observations on the etiology of rabies. Compelled to admit some special cause of the existence of spontaneous rabies, he thus proceeds:—"The reflections which I have made on the development of rabies in the Tiburtine country, induce me, among other causes described by authors, to recognise one exclusively, which I think will be the same wherever essential rabies manifests itself. It is neither rage, nor hot food, nor putrid meat, nor confinement, nor excessive fatigue, nor suppressed perspiration, nor variety of temperature, but simple *venereal desire existing to excess and not satisfied.* This circumstance seems to me to be the absolute cause of rabies. There are a greater number of male dogs at Tivoli than of females. The bitches when they are at heat are usually shut up, that they may breed with some selected male; the other dogs, led by instinct, wander about the houses in which the females are confined. In proportion as the gratification of the natural desire becomes more difficult it increases in violence, and it is easy to conceive of the sufferings of the animal, and the constitutional injury inflicted, when these desires are not gratified at all."

The *particular structure of the sexual organs* in the genus *canis* strengthens, according to the author, the opinion that this may be the exciting cause of rabies. "They have no *vesiculæ seminales*, so that the semen cannot be secreted without copulation; and there is, besides, in the canine race, a mechanism which prolongs the act of copulation. In other animals, on the contrary, provided with *vesiculæ seminales*, there is a kind of reservoir for the semen, in which it cannot only be absorbed, but from which it can be occasionally ejected without copulation. The constant superabundant semen in the spermatic vessels of the dog, and the state of venereal orgasm in which he so frequently or almost constantly is, must produce their effect on his whole constitution.

"In Egypt, and in other Mahometan countries, rabies is unknown, on account of the facilities which the canine race there experiences for the gratification of venereal desires. Some celebrated authors assert that castrated dogs are rarely affected with rabies."

In a second memoir, M. Capello endeavours to show that the opinions of several authors are in accordance with his, that rabies cannot be communicated to a third individual.—*Veterinarian, Nov.*

ADHESION OF THE PLACENTA TO THE FUNDUS UTERI, SUCCESSFULLY TREATED BY ERGOT,

By E. Worrell, M. D., Surgeon to the U. S. Army.

This was the case of a black girl, the placenta being retained three days after delivery. She had severe pain in the region of the uterus; hot dry skin; pulse 120, and very small; a most disgusting stench was observed on removing the bed clothes; the introduction of the finger gave her intense pain; the edges of the os uteri were firmly contracted and unyielding; by drawing the cord gently, the adhesion was found to be at the fundus. Fifteen grains of ergot were administered, and five such doses were given at intervals of half an hour each. Immediately after the fifth dose, the os uteri dilated, and the placenta came away. The girl did well, with the exception of a slight phlegmasia dolens, which yielded to simple remedies.—*American Jour. of Med. Sciences*, May, 1834.

ON THE INVOLUNTARY DISCHARGE OF URINE IN CHILDREN.

By Mr. Wardrop.

There are many diseases which have not excited much of the attention of medical men merely because they do not usually lead to any very serious termination. Such ailments, however, may not be the less a source of discomfort, or even of affliction to those who suffer from them, and therefore there is surely as much merit in investigating their nature, and contriving means

to relieve them, as in discovering the mode of curing a disease which, though it may be of a fatal tendency, yet very rarely afflicts mankind. This remark is particularly applicable to the involuntary discharge of urine incidental to children, an ailment which, as far as I know, has not been noticed in medical writings, except slightly by Mr. ABERNETHY and Dr. HAMILTON, and which, from its having been considered as an affection entirely under the influence of the will, or a *bad habit*, a harsh, unkind, and inefficacious moral treatment, has usually been employed to correct the afflicted youth, being often exposed to ignominious punishment. There are indeed, many distressing states of mind which are too often considered as the effect of the imagination, or which are supposed to be under the influence of the will; whereas I may venture to lay it down as a general maxim, and as one which it will be particularly useful for the young practitioner to keep in mind, that whenever any alteration is observed in the moral disposition, temper, or intellectual habits of individuals, such will invariably be found to be accompanied by a disturbed state of some organ or function of the body. We all know how languid the mental powers become when the stomach is burdened with too full a meal,—how the temper is altered by the presence of undigested food, which makes it the more unaccountable, that the state of the physical frame, in those who are afflicted with an involuntary discharge of urine, should not have become a subject of medical investigation.

The chief object of the present observations is to point out that this complaint, in place of being under the influence of the will, is a sympathetic affection, never present without some derangement of the digestive organs, and when that disturbance is once cured, the involuntary discharge of urine ceases. Indeed, so fully aware are some parents to whom I have communicated this view of the complaint, and in whose experience it has been verified, of the accuracy of the remark, that the recurrence of the discharge of urine in a child who had once been afflicted with it, has been to them a sufficient warning of the return of the primary and bodily evil.

I may briefly remark, that the affection to which I here allude is confined to boys; that it takes place only in bed, usually towards morning, and commonly about the same hour; that in some patients it recurs every day, in some irregularly; in some it continues only for a few weeks or months, whilst in others it lasts for years. In all cases the digestive apparatus is deranged, and more commonly the large intestines.

Case 1.—A youth, fifteen years of age, had been for some years more or less subject to an involuntary discharge of urine, which took place in bed early, and usually at about the same hour of each morning. On inquiry, it appeared that his health was always out of order when he was afflicted with this involuntary discharge of urine, the primæ viæ being then deranged. I ordered him every second night a succession of doses of one grain of calomel, with three of rhubarb, and a dose of senna on the alternate nights. By this treatment his general health rapidly improved, and in a few weeks the sympathetic affection of the urinary organs was completely checked.

Case 2.—A youth, ten years of age, had been for some months subject to void his urine almost every morning whilst asleep, to correct which a variety of means had been contrived. When at school it was considered by the master to be a bad habit, and he was subjected to cruel and harsh punishments. He had a sallow complexion, a loaded tongue, a craving appetite, his bowels were irregular, and the abdomen was tumid.

The alimentary canal being first evacuated by the free use of purgatives, I ordered him every alternate night one grain of calomel, combined with two of rhubarb, and a small dose of soda and rhubarb twice a day. Under this treatment his health progressively improved, and in a few weeks he no longer suffered from the involuntary discharge of urine. He was, however, occasionally subject to attacks for several years afterwards, and whenever that symptom recurred, his parent considered it as a warning of a disturbance in his health, which was treated accordingly, and the habit ultimately destroyed.

The foregoing observations will, I trust, have the effect at least of calling the attention of the surgeon to a rational mode of relieving those who are afflicted with an involuntary discharge of urine; and if the views of the nature of this complaint, which I have given, be correct, the humane practitioner will not only be enabled to relieve the sufferer by medical treatment, but he will be enabled to impress on the minds of those who have the care of youth, the true cause of this malady, and will be gratified by saving many from reproach, and even from harsh punishments.—*Lancet, Oct.* 1834.

TRANSFUSION OF BLOOD IN UTERINE HEMORRHAGE.

The following cases of the transfusion of blood in uterine hemorrhage deserve to be added to those which are already on record. The small quantity of fluid injected on the present occasion, evidently proves that the

blood acts rather as a stimulus to the heart than by virtue of its mass supplying the place of the fluid lost.

Case 1.—A female, 41 years of age, the mother of several children, after a suppression of the menses, which lasted for two months, was suddenly seized with uterine hemorrhage, which soon became very abundant. The woman continued to lose blood for eighteen hours, when Dr. Klett was called. He found the patient extremely reduced; pulse almost insensible. The quantity of blood lost was very great; it had traversed the bed and covered the floor of the room. Astringent medicines were immediately administered, frictions practised on the belly and chest, and astringent injections thrown up into the uterus. These means were unavailing; a draught containing sulphuric ether and the oil of canalla failed to support the strength of the patient, and the symptoms of approaching dissolution began to set in. Under these circumstances M. Klett resolved, for the first time in his life, to try the effects of transfusion of blood; and, accordingly, two ounces of that fluid were drawn from the arm of the patient's husband, a strong healthy man, and transferred to her. The result was surprising, the patient immediately opened her eyes, which had been shut, and the pulse became sensible; the hiccup ceased; the extremities recovered a little heat, and the countenance improved. The medicines before given were re-administered, the hemorrhage was arrested, and the patient recovered consciousness. The ratanhia, combined with iron and bark, was continued, and the woman speedily recovered.

Case 2.—On the 17th of February, Dr. Klett was called upon to visit a woman, 31 years of age, who had lost a great quantity of blood within the ten preceding hours. The symptoms enumerated in the former case were present, and the patient had taken leave of the world. She resembled a person actually dead. The successful result of the last operation induced the author to repeat it. The medicines commonly given in such cases were ordered, and two ounces and a half of blood from the arm of the woman's husband thrown in. Life seemed to be immediately reanimated as by an electric spark, astringent remedies had the effect of arresting the bleeding, and the patient's health was finally re-established by a nourishing diet.—*Gaz. des Hopitaux*, Oct. 7th, 1834, from *Medicinisches ches Cor. Blatt.* No. 6.—*Lancet, Oct.* 1834.

NEW METHOD OF REDUCING LUXATIONS OF THE HUMERUS.

Several months since I read a report in The Lancet of a new method of treating dislocations of the humerus, suggested by a pupil at the *Hotel Dieu*, and immediately adopted by Baron Dupuytren, who, possessing a liberal and docile mind, is ever ready to test the innovations of his juniors. I feel very happy in being able to add my testimony in favour of this plan, which can be carried into effect with great ease both to patient and practitioner. A single individual extended the arm *perpendicularly upwards*, whilst with my thumb I easily pushed the head of the bone into its place. It is necessary to add that the accident was recent, but the patient was strong and muscular.—*Lancet, Sept.* 1834.

MR. LISTON.

Upon the recommendation of the Faculty of Medicine of the London University, Mr. Liston has been requested by the Council to accept of the office of surgeon to the North London Hospital, (the hospital connected with the London University,) a request which, we believe, Mr. Liston has complied with; and, we regret to add, he will leave Edinburgh early next month, to enter on the important duties of his office. By Mr. Liston's departure from the metropolis of Scotland, the Edinburgh Surgical School will be deprived of its brightest ornament, and the Scottish public will sustain a loss which will long be a matter of regret.—*Courant.*—*Glasgow Courier, Oct.* 30th.

ABSORPTION OF EXTERNAL POISONS.

********* as soon as the epidermis is removed, the skin becomes like other membranes, and, in consequence of its great vascularity and the rapid circulation of blood in its capillary vessels, quickly takes up any substance placed in contact with it, and affords the phenomena of imbibition and absorption in a very striking manner.

On this simple fact are founded vaccination, inoculation, and the endermic method of introducing medicinal substances into the economy through the medium of the skin: the process for each is extremly simple, and the only physical conditions which you have to fulfil are, to raise up or remove a small portion of the epidermis, and place the substance which you wish to act, in close contact with the vessels ramifying on the surface of the chorion beneath. A knowledge of this fact is also applicable to cases where you wish to retard or oppose the absorption of poisonous substances. For example, when the individual has been bitten by a mad dog, your first care should

be to examine attentively the state of the epidermis in the neighbourhood of the hitten part; whenever the membrane remains uninjured, you may assure yourselves that no poisonous substance has been introduced, and that, consequently, the life of the patient is not placed in any dangerous position.

In attending patients affected with hydrophobia, you should lay peculiar stress upon this circumstance: as long as the epidermis remains sound, you may receive the saliva upon your hands, your face, or any other part of the body, without incurring the least risk; but the most trifling cut or scratch by which the epidermis has been raised, may afford an entrance to the poisonous matter, and will require the employment of every precautionary measure usually employed to prevent its absorption, as washing the part, canterization, &c. The case is different when the injury inflicted arises from the bite of a viper; this animal has, as you know, a means of inoculation peculiar to it; this consists in a gland furnished with a kind of tube, and situated near the root of the fang: the poisonous matter there secreted is projected at the moment the bite is given, and you are certain that it is placed in contact with the vessels of the skin; hence an accident of this kind requires instant treatment, to prevent the absorption of the venom, and and the fatal consequences which would necessarily result. I have taken the saliva of a man affected with rabies, and placed an atom of it upon the true skin of a dog. In thirty-six or forty days afterwards, the animal became mad, affording another proof, if indeed any were necessary, of the certainty with which cutaneous absorption takes place under the physical conditions already laid down.

There is one practical observation which I wish to make, before quitting this part of the subject, viz., if you place upon the skin any substance, such as a strong alkali, &c., which has the property of dissolving or acting chemically upon the epidermis, it is sure to be absorbed, and to produce its effects very rapidly; and, again, when you have occasion to administer any powerful remedy in the form of a bath, examine the state of the skin; for if any considerable portion of the cutaneous envelope happen to be denuded, if, for example, the patient be covered with syphilitic pustules, &c., he may be poisoned by the quick introduction of the substance which, under different circumstances, would have remained innocuous, or produced beneficial effects.—*M. Magendie's Lectures.—Lancet, Oct.* 1834.

MR. WARDROP ON THE TREATMENT OF STAPHYLOMA.

The processes which nature employs for the cure of some diseases afford an unerring guide to the surgeon, pointing out to him *principles* of treatment which he ought to imitate. Spontaneous hemorrhages, profuse perspirations, the bursting of abscesses, and the consolidation of an aneurysmal sac, are all examples of efforts which the system itself is capable of making for the cure of disease. In like manner, when the urine cannot be evacuated from an obstruction in the urethra, nature, in order to preserve life, establishes a fistulous opening between the obstructed point and the bladder, to allow the expulsion of the urine; and when the nasal duct becomes obliterated, she causes the lachrymal sac to suppurate and burst, so that a channel may be formed by which the superabundant tears which would impair the sight can flow over the cheek. With the same consummate design does nature relieve a staphyloma, and having observed the process which she employs for this purpose, I was led to adopt the principle of treatment which I am now about to recommend.

I have endeavoured to explain the successive changes which the cornea, as well as other structures of the eye undergoes when this organ becomes staphylomatous.* I have stated that previous to the appearance of a staphyloma, a portion of the cornea is always eroded or destroyed by ulceration, the ulcer penetrating the entire thickness of that tunic, and thus affording a channel for the escape of the aqueous humour. This opening in the cornea is, when small, plugged up immediately after the escape of the humour by an adjacent portion of the iris, and when large, by some of the hyaloid membranes also,—the vitreous humour being pushed forwards.

The transparency of the prolapsed portion of vitreous humour is generally preserved for a few days, and even to such a degree, that I have sometimes known the vision of the eye remain tolerably distinct, creating even a hope of recovery, until a process, which may not be improperly denominated *cicatrization*, commences—the capsule of the vitreous humour then becoming opaque, laminæ of lymph being effused upon its surface, and thus replacing the lost portion of cornea. During the formation of this new membrane, the eyeball becomes enlarged, and is projected forwards, forming the commencement of a staphyloma. This new membrane, though at first thin, and more or less transparent, gradually becomes denser, white streaks appearing over it in different directions, which, finally, become so numerous, as to convert the whole surface into an opaque bluish-

* See "Morbid Anatomy of the Human Eye," Vol. I.

white swelling, properly called *staphyloma*. Now it will generally, I may almost say universally, be found, that an eye which has been for some time in this state, has occasionally had a quantity of aqueous humour emitted from it, this fluid escaping through a small orifice or *punctum* in the staphyloma, which punctum, except at the time of the emission, is covered by an extremely thin and pellucid membrane. In almost every staphyloma this punctum may be discovered like a small point, not larger than the head of a common pin, and most generally situated near the apex of the tumour. On minute examination, the dark-looking spot is found to be a perfectly transparent vesicle, which, by the slightest touch of a pointed instrument, gives outlet to some aqueous humour. When there is a redundancy of aqueous humour, it is easy to imagine how well calculated this punctum is to perform the office of allowing any superabundant portion of that fluid to escape, for whenever it collects in such a quantity as to produce over-distention, the thin membrane covering the punctum gives way, and allows the exit of the fluid; while, at the same time, by the speedy reproduction of the membrane, the punctum is hermetically sealed, and all communication prevented between the cavity of the globe and the external atmosphere,—a state which in no instance of a *serous* cavity can remain without bad consequences.

For reasons which I cannot pretend to explain, it would seem that in a staphylomatous eye, the aqueous humour continues to be secreted, and, when redundant, finds its exit through a punctum, such as has now been described;—just as may be observed of hemorrhoidal tumours, a small opening being formed in them, which gives way to permit the escape of a superabundant quantity of the sanguineous fluid, which opening is afterwards sealed up by coagulated lymph, until such a congestion of blood again takes place as the system requires to be relieved from.

But it not unfrequently happens that a staphyloma becomes extremely painful from over-distention of the parietes of the tumour, occasioned by the membrane which covers the punctum not giving way, and hence preventing the discharge of the superabundant aqueous humour. In cases of this description, a prominent transparent vesicle may be perceived, projecting from the punctum, which, when opened, emits an aqueous fluid, after which the eye is instantly released from pain.

Treatment.—The account now given of staphyloma is not only interesting in a pathological point of view, but it leads to some important practical reflections. It points out how easily the pain and misery which sometimes accompany a staphyloma may be relieved, and, also when only a small portion of the cornea has become staphylomatous, it explains how the transparent portion may be rendered useful to vision. Whenever, therefore, a staphylomatous eye becomes painful and inflamed, accompanied by a feeling of distention and pain in the head, the discharge of the aqueous humour will be found to give immediate relief.

Case.—A gentleman, with a staphylomatous eye, felt it suddenly become soft when rubbing it with his finger, part of the aqueous humour having at that moment escaped. Afterwards two or three drops flowed out every week, and when this periodical discharge did not take place, he was seized with pain and tension of the eyeball, which symptoms vanished whenever the evacuation of the humour took place.

Case.—A gentleman had a small staphyloma of one eye, which suddenly became painful. The pain rapidly extended to the brow and the back of the head, and became so agonizing that in the space of a few hours he was distracted with its severity, becoming extremely pale, while his pulse was feeble. When in this state, I discharged the aqueous humour, and the operation was instantly followed with great relief, and in a few hours he was perfectly recovered. The eye was at intervals of several weeks three times attacked in a similar manner, and on all these occasions the discharge of the aqueous humour was followed by immediate and complete relief.

In order, however, to prevent a recurrence of such attacks, after making an incision in the cornea, I snipped out a small portion of it, and the orifice thus made was afterwards covered by a thin pellucid membrane, which readily gave way whenever the aqueous humour was in excess; and when I saw this patient at a distant period after the operation, I found that he had ever since continued free from attacks of pain.

But the artificial discharge of the aqueous humour in a staphylomatous eye, and the establishment of a punctum or fistulous orifice to prevent any future undue accumulation of that fluid, may be employed for a more important object than mere relief from pain, for when a certain portion of cornea remains transparent, and the pupil is not together obliterated, by reducing the staphylomatous prominence, vision may be preserved to a greater or less extent.

Case.—A girl had completely lost the sight of one eye, the globe having collapsed, while the other eye had become staphylomatous in consequence of puriform oph-

thalmia. There was, however, only a small portion of the cornea opaque, but this portion covered the pupil, that aperture having been dragged from its natural position by the adhesion of the iris to the ulcerated cornea. In this case, I punctured the cornea with a needle no less than sixteen times, and some of these operations were performed at considerable intervals. By this treatment the cornea was not only restored to its natural form, but its obscurity was diminished in so remarkable a degree that she was afterwards enabled to see the most minute objects ; and she visited me many years afterwards with her sight unimpaired.

The treatment of staphyloma by puncture may, therefore, be said to apply to two states of the disease. In the first it is employed to relieve the pain and inflammation excited by an over-distention of the eyeball ; and in the second, when, besides a staphyloma, a portion of cornea remains transparent, the repeated discharge of the aqueous humour, and the establishment of a fistulous orifice, will have the effect of restoring the natural sphericity of the cornea, and thus render that portion which remains transparent more or less useful to vision.

There is still another state of staphyloma, which requires the assistance of the surgeon, and for the relief of which a severe, and, as I shall endeavour to show, a very unnecessary operation has usually been employed.

It not unfrequently happens that a staphylomatous cornea progressively increases, and acquires such a bulk as to prevent the closure of the eyelids during sleep, becoming a source of much irritation, and having an unsightly appearance. In such cases, the common practice is to cut off the whole of the staphylomatous mass ; this operation allows the contents of the globe to escape, when suppuration ensues, the sclerotic coat contracts and is puckered up, and the eyeball completely collapses, being no longer an annoyance.

It long ago occurred to me that this operation,—an operation always followed by severe suffering, might be saved, by imitating the process which nature herself employs for the cure of staphyloma, when the tumour has acquired a large bulk, —a process which I have already so fully described, viz. that of establishing a fistulous opening to prevent any superabundant collection of aqueous humour.

When a staphyloma has grown very large, and its tunics have become attenuated, it often happens that these give way, more or less of the contents of the globe escapes, inflammation and suppuration supervene, the eye collapses, and afterwards a fistulous opening or punctum is established.

The operation which I have for many years employed, is that of the removal of only a very small portion of the staphylomatous cornea,—a portion made large enough to allow the crystalline lens and requisite quantity of vitreous humour to be evacuated, but not so large as to expose the whole serous cavity of the sclerotica to the influence of the atmosphere. By making such an opening, not only is the precise and necessary quantity of the contents of the globe removed, so as to allow the eyeball to be diminished to the desired degree, but the great pain of the sudden evacuation of the whole contents of the globe, which takes place in common operation, is saved, the subsequent inflammation is extremely trifling in comparison with what follows the complete emptying of the globe ; and, lastly, the eyeball can be made to collapse just to that degree which may be required to admit the use of an artificial eye.

Case.—A man had a violent attack of inflammation in his right eye, which terminated in the formation of a large staphyloma, for the relief of which he applied to the Hospital of Surgery. The whole cornea was white and opaque, and projected so considerably as to prevent the eyelids from being closed over it. As he suffered much inconvenience from this state of the eye, I deemed it expedient to reduce the bulk of the tumour, which was accomplished by a very simple operation. A curvilinear incision was made with a cataract knife in the anterior part of the tumour, so as to form a small flap in the diseased cornea. Through this incision the lens and some vitreous humour were evacuated. The globe of the eye was now reduced to a smallar size than natural, and then the flap of the cornea was snipped off. The patient complained of slight uneasiness in the head on the evening after the operation, to relieve which leeches were applied. No inflammation supervened, the eye being only slightly reddened. The orifice made in the cornea was filled with coagulated blood, and in a few days he was completely free from the inconvenience which the staphyloma had occasioned. The orific gradually contracted, leaving a fistulous opening, through which aqueous humour was occasionally discharged.

Case.—A gentleman had a very large staphyloma, which involved the sclerotic coat as well as the cornea. It became the source of considerable pain, and prevented the eyelids from closing during sleep, and was so unsightly, that its removal became urgent.

I made a small lunated incision through the cornea, when the aqueous humour, which was in considerable quantity, spurted out, and I pressed through the opening a small portion of vitreous humour and lens. The evacuation of these was sufficient to reduce the globe to about its natural bulk, and I cut off the flap of the wound. The operation created very little pain, and only slight inflammation. On the third day, fearing the eyeball might remain too large, I reopened the wound with a curette, and readily squeezed out the vitreous humour in sufficient quantity to reduce the eyeball to what I deemed a proper size. The redness abated in a few days, and this patient afterwards wore a glass eye with every advantage.

It can never be too strongly impressed on the mind of the young practitioner, that the most rational and affective modes we possess of treating diseases, are in accordance with, or in strict imitation of, the process which nature employs for the same purposes, as it ought to lead us to inquire and observe on all occasions what those means are, and how they are to be assisted or imitated by art.—*Lancet, Nov.* 1834.

GALVANIC ELECTRICITY IN PARALYSIS.

M. Marianini has indicated a means of applying galvanic electricity to the cure of paralysis and paraplegia. A current should be passed across the limb, during many days, or even weeks; not a continuous current, but rapid successive discharges of a battery, at first weak, but gradually augmented. He states that by this method he obtained many cures.—*Dublin Journal Med. and Chem. Science.*

A TRIUMPH IN SURGERY.

"*Ad extremos Morbos, extrema remedia.*"

The writer of this paragraph witnessed on Saturday morning one of the most appalling and painful operations ever performed upon any living human being; and while it reflects credit upon the surgeon, and does honor to the country, it serves as a convincing proof to suffering humanity, that while there is life, there is hope, and that none need despair even in the most aggravated forms of disease. The operation above referred to, was performed by Dr. Mott with his usual skill and intrepidity. The subject of it was a young man about twenty-six years of age, who had been for a long time afflicted with *stone*, and which had increased with unprecedented rapidity, until it attained a size so great as to occupy the whole of the bladder in its distended state; yet, wonderful to relate, this *huge mass* was entirely and successfully removed. Several attempts were made by the surgeon, both to crush it and to drill it into pieces, in order that it might be taken away with greater facility, as well as with more safety to the individual; but these efforts were all abortive—leaving no alternative but that of enlarging the wound, and removing it entire.

Since the operation, the patient has been doing well, and bids fair to recover. The stone was ascertained, immediately after, to weigh 17oz. 3 dwts. avoirdupois, which is nearly double that of any other ever taken from the human subject, while living. Sir Astley Cooper remarked, in his lectures, that eight or nine ounces is the largest size that can pass the bony structure in the gripe of the forceps, which is mentioned for the purpose of conveying, if possible, to the mind of the reader, an idea of the great difficulty and danger necessarily attending so important an operation.—A FRIEND TO MERIT. *From the Evening Star.*

We republish the above, not only on account of its being a notice of a *master-piece* in surgery, but to make a few remarks in relation to the manner of publication; even did we approve of newspaper puffing, we know that the professional character of Professor Mott as a distinguished surgeon does not stand in need of such hackneyed aid, we therefore hope that a "Friend to merit," and all other medical writers who may have fallen into the same error, will in future seek some proper channel for their medical communications, and divest themselves of every thing like bombast. "A friend to merit," speaking of the size of the stone extracted, says that it "is nearly double that of any other ever extracted from the human subject while living," this is a mistake, as will be seen by referring to Sir Astley Cooper's lectures; that gentleman extracted from the human subject while living, a whole stone weighing sixteen ounces. *Eds. United States Med. and Surg. Jour. August* 1834.

MEDICINE IN THE UNITED STATES.

We have made considerable exertion to procure lists of the numbers of medical students attending the different medical schools in the United States during the past winter, but have not succeeded; we, however, believe that we shall have correct lists for our next number—from information received the number will not fall far short of twenty five hundred!!! *Eds. United States Med. and Surg. Jour. August* 1834.

MEDICAL CORONERS.

Forensic medicine did not assume a consistent form as a science until the year 1606, when that excellent and benevolent prince, Henry IV., of France, issued letters patent to his first physician, conferring on him the privilege of appointing two surgeons in each considerable town, and one in those of smaller note, who should exclusively send in official reports of all persons murdered, wounded, mutilated, or otherwise injured. In short, they were invested with a jurisdiction very similar to that exercised by our coroners.

Henry IV., who enjoyed the rare privilege of possessing a larger portion of common sense than any other prince we read of, very justly considered that medical men, and not attorneys, were the fittest persons to fill such an important office.—*Lon. Med and Surg. Jour. Oct.* 1834.

MEDICAL FEES.

A question of law at present excites the attention of the medical world in Paris. A physician, celebrated for his skill in lithotrity, has recently cured the Count de la B——, formerly a minister of Charles X. M. de la B——, after writing in vain to M. A—— to fix the amount of the demand, sent him three thousand francs. M. A——, in reply, stated that it was too small a remuneration for his services, and demanded ten (*dix*) thousand francs in full. M. de la B—— read, or pretended to read, the "ten," "six" (*six*), and sent the Doctor three thousand francs in addition to make up that sum. M. A—— then renewed his demand of the ten thousand in the most positive and plain manner, and the Count in reply refused to give more than he had already done; the Physician then commenced proceedings, and the matter is to be decided before a competent tribunal immediately. In a similar case, M. Dupuytren was paid by a rich banker in a way which he deemed insufficient,—only six thousand francs,—and he replied in the following terms:—"I thank Mr. H——for the six thousand francs which he has this morning sent me, and I only regret that he did not avail himself of the opportunity to pay me in full.—*Lon. Med and Surg. Jour. Oct.* 1834.

COLD EFFUSION IN CHOLERA.

Mr. Edgar Ashe Spilsbury, Surgeon of Wallsall, in a letter to a local newspaper, says that in all cases of cholera, except the apoplectic stertor of death, he has dashed a bucket or two of cold water on the naked body, with the best effect. In many severe cases he has wholly relied on its efficacy, without administering an atom of medicine, and he adds, "if I am seized with cholera to-morrow, such is my impression of its value, I should trust to it alone." He narrates the following case. "— Oliver, a washerwoman, aged 70, seized at nine o'clock, P.M. with severe vomiting, bilious evacuations ran from her involuntarily, pain of the lower bowel, from her cries, intense; I saw her within an hour of seizure. A large flannel dipped in cold water was liberally applied over the whole skin; she was instantaneously relieved from all her symptoms, save a lightness of head; was free from complaint the next morning, and had no return; she perspired profusely under the blankets."—*Lon. Med. & Surg. Jour. Oct.* 1834.

NOLI ME TANGERE.

Samuel Waller, æt. 19, a native of Mitcham, was admitted, under Mr. Lynn; into John's Ward, Jan. 15, 1833. Is a lad of a strumous habit of body, pale, and thin: a linen draper by trade. He left Mitcham about three years ago to live in London; previous to that, he says, nothing ailed him; since then, whenever he caught cold, the glands in the neck would enlarge; there are two cicatrices under the chin, namely, of scrofulous disease. The disease for which he was admitted commenced on the alæ nasi, spreading thence to the lip and part of the cheek. There is a thick yellowish encrustation on the right side, involving that side of the upper lip, the right ala nasi, part of the cheek, and part of the integument near the ear, the latter being a separate and distinct crust. This is surrounded by an areola of inflammation, and the whole of the integuments around are swelled and enlarged; the right naris is nearly obliterated, being very much contracted. On the sole of the right foot there is a similar encrustation, attended with inflammation, and it is the only part which is painful. He has been in the habit of attending Mr. Lynn. at Chatham, previous to coming to the hospital, and has had aperient medicines prescribed for him. The course which the disease takes is as follows:—vesicles, containing a yellowish fluid, make their appearance, burst, and then a crust forms.

Flour is ordered to be applied to the part, and he is to have Lynn's pills* to keep his bowels regular.

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* R. Extr. colo. comp. } aa ℥j.
Pil. aloes c. myrrh. }
Hyd. submur..... ℥ss.

Fiat massa; divide ℥ij. in pil. xxiv.—A very excellent aperient pill, in great repute in Westminister.—REP.

27th. Mr. White saw the patient to-day and observed, that if the case was his, he would remove the crust by emollients, and then apply leeches freely. The disease continues much the same as at last report.

Feb. 1st.—The inflammation and swelling seem lessened.

20th.—The disease, if anything, is on the increase; has been sometimes better, sometimes worse. Mr. Lynn says, that John Hunter considered the lixivium kali (the liquor potassæ) not unfrequently useful in such cases. He accordingly directed its exhibition, and the pills to be continued.

R. Liq. potassæ, ʒj. ; aquæ puræ, lbss.—
Capiat coch. ampl. bis in die.

28th. Is rather improved; the tumefaction is not so great; the encrustation is peeling off in parts, leaving a reddish, but apparently sound integument beneath.

March 25th. Has been taking five minims of the liquor potassæ three times a day, for the last month, with occasional benefit. Ordered by Mr. Lynn to have ʒss. ter in die.

April 2nd. The disease continues to get worse. Mr. Lynn ordered the ung. æruginis to be applied to the parts, and the lixivium to be omitted.

4th. All the crusts have been removed by the ung. æruginis; the parts diseased appear to be an ulcerated sore, of a pale red colour, unattended by any purulent secretion of any consequence. App. ung. sequens faciei,

R. Ung æruginis, ʒj.—Adipis, ʒiij.—Ft ung.

6th. The whole surface of the sore is somewhat improved in appearance; very little pain caused by the application.

12th. Face improving; but the ulceration on the nose appears stationary; bowels not regular. To have Lynn's pills occasionally.

20th. The disease is again stopping. Ordered a solution of the arg. nit. gr. ij. ad ʒ j., and the ointment to be applied over that.

May 10th. Face and lip improving.

28th. Nearly well. Cont.

June 4th. The right ala nasi having been nearly destroyed, and the cavity almost closed, a sponge tent was ordered to be used to dilate it. This plan was pursued for some time with material benefit; dilatation took place, but not to the full extent, and he was discharged with directions to follow up the use of the sponge tent until it was no longer necessary.—*Lon. Med. and Surg. Jour. Oct.* 1834.

ON THE TREATMENT OF GONORRHŒAL AND SYPHILITIC AFFECTIONS WITH IODINE.

To the Editor of the Medical Gazette.

Sir,—The facts to which the accompanying cases refer are so important, that I conceive it my duty to lay them before the public; and as there can hardly be two opinions on the subject, it would be no compliment to apologize for sending you this communication, for I do not doubt that you will consider it worthy a place in your columns.

Remaining respectfully yours,
CHARLES CASWALL.

18, Woburn Place, Russell-Square,
Oct. 28, 1834.

Case I.—Henry Falconer, æt. 23, applied at the General Dispensary, Aldersgate-Street, on the 26th of July last, with a severe gonorrhœa, which had existed about a month; and he had been previously affected with the disease five times. He complained of constipation, and excessive pain in emitting his urine.

He was ordered to take fifteen grains of jalap, and three of calomel, for the immediate relief of his bowels, and half an ounce of castor oil when occasion required.

The hydriodate of potash, in the form of an ointment, was also ordered (a drachm of the hydriodate to an ounce of lard), which was directed to be rubbed in along the course of the urethra twice daily, and to be applied around the penis (on lint) during the day and night.

July 31st.—The gonorrhœal discharge was much diminished, and the pain caused by the passage of the urine was not so severe. The ointment and oil to be repeated.

Aug. 2d.—The discharge was much less, and the pain had subsided. The ointment was directed to be continued.

14th.—The discharge still continued gradually to diminish. Twelve minims of the tincture of iodine were now prescribed to be taken three times a day in cold water.

Sept. 2d.—The ointment and tincture were ordered to be continued, although the discharge had entirely subsided.

On the 18th no return of discharge had occurred, and the patient was dismissed cured.

Case II.—George Allum was admitted a a patient on the 15th of July, with gonorrhœa, an ulcer on the glans penis, and in the right groin a bubo the size of a hen's egg, in an advanced stage of suppuration. The bowels constipated.

R Pulv. Jalapæ, gr. xviij.; Hydr. Sub. gr. iij. M. Ft. Pulv. statim sumend.

℞ Pil. Hydr. Submur. Comp. gr. v.
omni nocte maneque.

The hydriodate of potash ointment to be applied, as in the former case, both to the urethra and the bubo.

July 17th.—The ointment and pills were repeated: a compound senna draught was ordered as an occasional aperient, and a lotion of the subacetate of lead to be applied to the ulcer on the glans.

29th.—The ulcer was healed. The ointment and draughts were recommended to be continued.

August 2d, 9th, and 14th.—The patient persisted in the use of the ointment and aperient draughts as before, and on the 19th he was dismissed cured.

Case III.—Wm. King was admitted a patient on the 12th of August, with a gonorrhœal discharge of a week's duration, and attended with the usual symptoms.

The ointment of the hydriodate of potash was applied to the penis, as in the two preceding cases. The bowels to be relieved by castor oil when necessary.

August 16th.—The ointment was continued, and fifteen minims of the tincture of iodine were now ordered to be taken three times a-day.

19th, 26th, 30th, and September 4th—The medicines were repeated.

September 16th.—The patient was dismissed cured.

Case IV.—Thomas Oxford, æt. 22, admitted on the 14th of August, with gonorrhœa of two days' duration.

The hydriodate of potash was used, as in the former cases, and twelve minims of the tincture of iodine were directed to be taken three times a-day.

On the successive days—viz. the 16th, 19th, 26th, and 30th—the ointment and tincture were ordered to be continued.

September 4th.—The medicines were repeated.

16th.—The bowels were much confined, and the compound senna mixture was prescribed accordingly.

18th.—The gonorrhœal discharge had ceased the day preceding. One of the testicles was considerably inflamed and swollen. Eighteen leeches were therefore applied to the testicle, and a dose of jalap and calomel was directed to be taken at night, as the senna mixture had not relieved the bowels sufficiently. After the leeches had been removed, a linseed-meal poultice was applied to the testicle.

20th.—Twelve leeches were ordered, with the senna mixture and poultices.

23d.—As the inflammation had nearly subsided, and the swelling was greatly diminished, the ointment of the hydriodate of potash was ordered to be applied to the swollen testicle, and twenty minims of the tincture of iodine to be taken three times a-day.

25th—The medicines were repeated.

27th.—The patient was dismissed cured.

Remarks.—The foregoing cases illustrate the effects of iodine in gonorrhœa, hernia humoralis, and venereal bubo. In the two latter diseases I have not used it during the incipient stages; but I have witnessed the disappearance of a sympathetic bubo, the iodine having removed the gonorrhœal inflammation, as indeed it would be natural to expect.

The duration of the gonorrhœal discharge under this treatment is not greater, if so great, as when other remedies are employed; and the medicines in general use are of so nauseating a quality, that I conceive almost any others would be preferable. The cases I have now the pleasure of communicating sufficiently show that iodine is by no means a disagreeable substitute for cubeb pepper and copaiba. The remedy is a sure and safe one: its efficacy is perceptible from its earliest application; and under such treatment the disease continues gradually to subside, without any unfavourable occurrence.

The supervention of hernia humoralis in one of the cases to which I have alluded, was no doubt principally to be referred to the constipated state of the bowels.

It only remains for me to observe, that I have not opened a suppurative venereal bubo for the last eight months, and that I have almost invariably found the application of iodine sufficient to promote the absorption of the pus.

I cannot call to mind even a single instance in which the remedy has been unsuccessful. I have for some time past paid particular attention to the subject, and I should consider myself culpable in the extreme were I any longer to conceal such facts from the profession.—*Lon. Med. Gaz. Nov.* 1834.

WOUND OF BOTH FEMORAL ARTERIES WITHOUT HEMORRHAGE.

Larrey, *Histoirie Chirurgcale du Siege de Citadelle d'Anvers.*—An artilleryman, while standing with his legs asunder near a cannon which he was preparing to sponge, was struck by a bomb, which burst, passed between his thighs from behind forward, without fracturing either femur, and tore all the soft parts situated at the middle-third of the internal and posterior side of these members. No hemorrhage ensued, though the two femoral arteries appeared, amid the havoc of the soft parts, completely divided, and exhibiting a motion altogether erectile. The pulsations of both were very perceptible superiorly, till within three or four lines of the

divided extremities, where a sort of resistance to pressure was felt, as if the orifices of the two arteries had been stopped by a foreign body. It was true torsion of the vessels. It is almost needless to add, the patient did not survive —*Edin. Med. and Surg. Jour.*

M. DUPUYTREN.

M. Dupuytren's disorder is, we are sorry to find, assuming a more dangerous character. He no longer goes out; the last visit he paid was to M. de Rothschild, who ten years ago, paid him 100,000 francs for the restoration of a broken thigh. M. Dupuytren, however, still continues to give advice at his own residence, and speaks with great coolness of his health, it is said, allowing himself not longer than three months more to live. He will leave, it is said, five or six millions (upwards of £200,000) to his daughter, Madame de Beaumont, whose husband is a Peer of France.—*Lon. Med. and Surg. Jour. Oct.* 1834.

EMPLOYMENT OF ALBUMEN AGAINST THE CHOLERA.

Several cases have been published by M. Levacher, of Paris, in which the symptoms of this disease were extremely violent, that succeeded to this albuminous treatment. He has the white of eggs beat up in snow, and mixed with cold sugar and water, and administers this, both by injections and by the mouth. He further states, that in the course of 20 minutes after the employment, the patients are comparatively recovered. In this country the albumen of the egg has been tried, but it was mixed up with alkalies, which may tend to destroy the curative properties of the albumen.—*Lon. Med. and Surg. Jour., Oct.* 1834.

INSTRUMENT FOR STIFF AND CONTRACTED KNEE-JOINTS.

"This is a case, Gentlemen, also well worthy your attention. The boy, you see, has got a stiff and contracted knee-joint, and I am not quite certain whether the patella is fixed or not. If it be not fixed, he may recover the motion of the joint in some measure, which will be a very good thing for him, but if it be fixed, he may yet by the use of this instrument have a straight limb which will be of very great use to him; for, in its present contracted state, it is worse than no limb at all." The instrument to which Sir Benjamin adverted consists of a set of splints with strong leather pads and buckles, fixing them below the great trochanter, at the knee and above the ankle. Across the angle formed by the leg and thigh, there is a large groove into which a screw is fitted. These being attached to the posterior splints, the screw by being turned presses on each end, and brings the contracted limb nearly into the straight position. Sir Benjamin remarked, that he had used this plan in several cases with success, and that in this case he supposed it would take from nine to twelve months.—*Sir B. Brodie's Clinical Lectures. Lancet. Nov.* 1834.

LITHOTRIPSY.

This operation has lately been successfully performed at the above hospital by Mr. LLOYD, without any previous practice, we understand, on the dead subject. He experienced but very little difficulty in seizing the stone at the first attempt; and after two or three introductions of the instruments, the patient was discharged cured. The operation, which seemed at first to be one of considerable difficulty requiring great skill and manual dexterity, is now becoming more generally adopted; and at last it obtains some favour in our hospitals.

Two cases in which it was performed in the practice of a surgeon at Walsall, are recorded at page 32 of our present Number —*Lancet., Sept.* 1834.

THE INDIA
JOURNAL OF MEDICAL SCIENCE.

CALCUTTA, MAY 1, 1835.

We look forward with some anxiety to the conclusion of DR. MACKINNON'S case, as it leaves off just at that point where the question of prognosis must "give us pause." It is very much to be desired for the alleviation of a severe malady and the avoidance, if possible, of a formidable operation, that Lithotrity were more prevalent than it is in this country. Indeed it may be said that this useful application of modern Surgery is practically unknown at present in India; at least we are not aware of any medical man who either possesses the instruments* or has acquired the necessary adroitness in handling them. It is also much to be regretted that the use of the Stethoscope in this country is extremely partial, although the assistance it affords in arriving at correct diagnosis, especially in diseases of the thoracic viscera, is invaluable. It would be of importance to the cause of humanity and science, if it were

* By order of the Medical Board, a case of Lithotripsy Instruments has, we believe, been forwarded to Mr. Burnard of Benares. They could not be in better hands. *Eds.*

rendered conditional on the young medical man previous to receiving an appointment as assistant surgeon on any of the Indian establishments, that he should be thoroughly and practically conversant with those branches of medical and surgical science with which the names of Laennec, Civiale and Heurteloupe are so splendidly associated.

Although Mr. Hunter's paper on Cholera adds nothing to our idiopathic or remedial knowledge in relation to that mysterious malady, it will nevertheless be perused with interest by the practitioner. The spasms in some of the cases appear to have been of an aggravated character. Calomel and opium, as usual, were largely exhibited. Of blood-letting Mr. Hunter writes in measured, if not distrustful, terms: Its success or otherwise must of course greatly depend upon constitution. He seems inclined to think that the disease under peculiar circumstances may become contagious. It will be seen, from Mr. Hunter's cases on Hypertrophy of the heart, that he is in the habit of using the Stethoscope. We hope he will favour us with further accounts of his experience in pectoral or other complaints, that may come under his notice, as the turn of his remarks plainly shews that he is a close observer.

We entirely concur in our correspondent W.'s remarks on tatties in Bengal. At some up-country stations where the hot winds blow day and night, there could be no existing to an European, without the cooling and refreshing contrivance of the tatty. In Bengal, on the other hand, tatties appear worse than useless. Here we seldom have a hot wind, and even when such prevails, the simplest and most efficient way is to shut up the windows and doors, and keep the punkah going. Under no circumstances, even up the country, can it be quite safe to sit directly behind the tatty. Instances have been mentioned where persons going to sleep on a couch behind a tatty, have fallen victims to their imprudence. In Bengal we conceive tatties to be peculiarly objectionable for the reason stated by W. viz. the lulls that every now and then intermit the breeze. During these lulls, the pores of the skin are more open, and perspiration is liable to be checked by the return of the breeze, giving rise perhaps to feverish dryness of the surface with which the liver and other viscera sympathise. Even in such apparently trifling causes, serious affections often originate!

In the general justness of Mr. Campbell's remarks, as to the little reliance that the bulk of the natives of India place in European Medical skill, we entirely concur. It is no less mortifying than true, that natives, unconnected with us by habits of official intercourse, have very little confidence in our materia medica, or the dispensers of it. In Calcutta, however, if we may judge by the numbers of people who seek relief at the Native Hospital, and who apply for medicine at the Park Street and Guranhutta Dispensaries, this is not so much the case as it is elsewhere. The cause of the general want of confidence alluded to, arises from mutual ignorance. Medical men, as a body, are not sufficiently versed in the native languages as to pave the way to that perfect understanding that should subsist between the practitioner and his patient. The same ignorance extends to most of their customs, and prejudices. The natives on the other hand, having had little or no means of forming a judgment of their own on European medical science, cannot repose entire confidence in that which they neither know nor comprehend. It is to be hoped that the time is not far distant when both parties may be stimulated to the adoption of such steps as may remedy, what cannot be denied to be, an evil of some magnitude.

The remedy proposed by Mr. Campbell may answer very well prospectively, but to insist upon men who have grown grey in the service undergoing an examination in the Native languages, is rather *de trop*. Were the proposal adopted, from what we have understood of the nature of these examinations, we fear that pending the result most of the Native regiments, and civil stations would be without medical staff. Even at the time when

the College of Fort William was open to Military as well as Civil students, medical men were not, as far as we are aware, ever dreamt of as likely to become alumni, or prize earners of the institution. They had to pick up their knowledge of the language as they best might at the bed side of the sick; but several of them without any other stimulus than their partiality for such pursuits, and an eager thirst for knowledge, have distinguished themselves as linguists. Some of these had their reward, but we much doubt that they would have gone through such a course of study were there no higher stimulus offered to their minds than the prospect of getting medical charge of a corps. Mr. CAMPBELL, towards the end of his paper, expresses his surprise that greater zeal should not be manifested by medical men in this country. To this we have simply to observe, that zeal has been found no more wanting in the medical, than any other department of the service. To say that it more abounded in that class than any other, would be unbecoming and unjust. Zeal, however, to exist in general intensity and with enduring power, must be fed by a succession of mental stimuli. We leave it to others to say whether such abounds in Bengal.

By those who have had the misfortune to suffer under the effects of a diseased tooth stump, Mr. EVANS' invention of a double action lever for drawing teeth, will be acknowledged as an important one; and the practitioner will be well pleased to find such an useful addition made to his case of instruments. To us it appears that the lever in question is the best contrivance we have seen for taking teeth *perpendicularly* out of their sockets, and Mr. EVANS deserves great credit for introducing it to the public.

MEDICAL RETIRING FUND.—The reductions which have taken place in the higher grades of the Medical Service, since we last touched upon the subject of the Medical Retiring Fund, have forced upon the managers a conviction, that there remains but little hope of its being successfully carried into effect: and we ourselves are unwillingly compelled to admit, that circumstances which none ever dreamt of have occurred to render the whole project, but too probably, a failure. Under these circumstances the Managers, with the impression that they should thereby meet the wishes of a great majority of their subscribers, applied to the Government for permission to communicate with Mr. Curnin, upon the possibility of including the Bengal Medical Service in the Military Retiring Fund proposed by him for the army. This permission has been granted, but sufficient time has not yet elapsed to allow of any thing decided being done.

As the Court of Directors were for so long a time unwilling to sanction a separate retiring fund for their Medical Servants; there is little reason to anticipate any objections on their part to the amalgamation of the Bengal Medical Retiring Fund with the General Retiring Fund of the Army. And perhaps the readiest way to have this now-so-desirable measure effected, will be, for the members of the service, to communicate their wishes to the Military Secretary to the Governor General. We recommend our brethren to do this without delay; and as loss of time must take place, in the attempt to ascertain the sentiments of the general body upon the subject, the best mode of acting will be by each individual separately, and immediately, addressing that officer. We believe it may be done free of any charge for postage.

ITCH INSECT.—"A delirium of joy at this (the Itch Insect) discovery, every day betrays itself in the amphitheatre of the *Hospital St. Louis*," says the Lancet, with a characteristic sneer, after asking some questions as to the insect having caused the disease, or if the vesicle in which it is deposited is "caused by the deposition of its eggs, the development of which determines inflammation—or by the deposit of a poison,—by irritation produced by its members,—or by its bite, or does it shew itself in the individual merely in consequence of the attraction produced by the itch matter, or the filth attached to the person?" The

wonder, whose discovery, or rather rediscovery, has caused all this "*delirium of joy*" is thus described by the celebrated Raspail.

"The *Acarus Scabiei*, seen through the microscope, presents the form of a tortoise, a shining surface, more transparent in the centre than at the circumference, of a white opaque colour. Its other shades would appear to be the result of the division of luminous rays passing through the lens. The head, which may be considered as a perfect retracting sucker, is provided at each side with two articulated feet, terminating, at the tarsus, in a funnel-shaped prolongation. The insect is armed with four additional feet, longer than the former, but without the funnel-shaped appendage; this articulation is not at the sides, like those of the horse-acarus, but underneath the belly; on the back is perceived a number of eccentric lines at short intervals, and having the appearance of joints; the belly presents several dark coloured spots; the body and legs seem furnished with a quantity of hair of unequal length."

With regard to this *discovery*, as it is termed by the French Savans, who never allow of any thing having been done that has not been done by themselves, we may observe, that for our own parts, we never had any doubt as to the existence of the Acarus Scabiei, and we do not see how it could ever have been reasonably doubted, in the face of the host of authorities in its favour. It is mentioned in the 12th edition of the *Systema Naturæ of Linnæus* under the name of *Acarus Exulcerans*. A pedibus longissimis setaceis: anticis duobus. Fn. Svec. 1976 *Habitat in* Scabiei *ferina*. System Nat. Edit Duodecim. 1767 Tom 1. Pars 2. p. 1024. Dr. Turton, in his translation of Dr. Gmelin's edition of the same work, mentions it under the name now assigned to it, *Acarus Scabiei*. White with reddish legs, the 4 hind ones, with a very long bristle. Turton's Linn. Edit. 1802 p. 704. Fabricius in the *Mantissa Insectorum* mentions it, as—*Acarus Scabiei:* Albus, pedibus rufescentibus: posticis quatuor seta longissima. Mantis. Insect. Edit 1787. Tom. 2. p. 373. a description from whence that of Dr. Turton, perhaps, was taken. De Geer, one of the most accurate observers that ever lived, has, according to Kirby, given figures of it; and Dr. Adams and Bonomo have done the same, though we have not their works to refer to. We have a feeble recollection of having read in our younger days a work by Dr. Mead, in which the existence of an Itch Acarus is maintained. And although John Hunter, Dr. Heberden, Dr. Bateman, &c. were unable to find it, yet that circumstance by no means warranted a doubt upon the subject; for the cases of Scabies which they examined might, as it is conjectured, have been of a different species from that in which the insect is found, or of a species of Scabies with a smaller species of the insect; or the examinations might have taken place at periods when the insect was not fully developed. At all events the point is now settled; and, as we said above, we do not see how any reasonable doubt could ever have been raised upon the subject.

Medical Education.—In our remarks upon the subject of Native Medical Education, we accidentally omitted to insert an extract from the Will of that enterprising traveller, Mr. Moorcroft, with which we have been favoured by the kindness of Mr. Trebeck. By his Will, after making provision for those who had the nearest claims upon him, he, in case of the failure by death of Parties without issue who could take the property bequeathed, gave the ultimate residue of his property for the laudable purpose of establishing a Medical College in India. The contingency may, perhaps, never occur which would lead to such an application of the late Mr. Moorcroft's property, but still the spirit in which the bequest is made is worthy of attention, and of praise. The clause in the Will is as follows:

"In trust that they his trustees &c. &c. do and shall apply the same rest, residue, and remainder for and towards establishing a College for the purpose of instructing young men in the profession of Medicine and Surgery, in some part of the British Possessions in India, on such plan as shall, in the opinion of my executors, be most likely to conduce to the improvement and diffusion of the science of Medicine and Surgery for the benefit of the natives of Asia, after having duly considered the different schemes which may be presented to them. And I direct that a reward of Rupees Five thousand shall be given to the person who shall draw out a prospectus of a scheme of Medical Education that shall be approved by them, they taking the

opinions of those medical characters who may stand highest in their estimation."

Miasmata.—In our last number we noticed a very interesting memoir on the nature of Miasmata: and we have since, in a November number of the Lancet, met with a lecture of M. Magendie in which the same subject is ably treated.

M. Magendie states, that, by condensing the air of marshes, by means of cold and other agents, chemists have demonstrated the nature of Miasmata. When the sick are crowded together, the wards become filled with a most deleterious atmosphere, and the physicians and other attendants run the risk of being attacked by the disease. By submitting the air of those wards to experiment you can prove that it contains a deleterious matter; the vapours of the patient may be condensed, by the action of cold, into a liquid charged with animal matter of a highly putrid nature, and much more injurious than that procured from the exhalation of marshes; and in all cases of *hospital typhus*, or *yellow fever*, the atmosphere in which the patient resides is filled with such animal matter in the state of vapour.

In cholera, though that disease is more fatal than typhus fever, no such state of the atmosphere exists, not the least trace of the deleterious putrid animal matter being perceptible. Cholera cannot be escaped from by removal from the scene of its immediate action; yellow fever can.

In this country, so far as our own observation has extended, there is no great fear of the production of miasmata from the crowding together of human bodies; but marshes exist in abundance, and the fevers produced by them unhappily no less so. The subject is an important one, and we hope, ere long, to receive communications of experiments performed, which will prove the medical men of this country not to be behind those of any other country in the world, in this wide field of useful medical science.

Atmospheric Pressure.—The following remark, taken from a notice in the Lancet of the Revue Medical Francaise et Etrangere for October last, is curious, and appears more decidedly than any fact that has heretofore come to our knowledge, to point out one great practical use of meteorological enquiries.

Mr. Innod has invented a peculiar apparatus, for the purpose of augmenting or diminishing the pressure of the atmosphere on the body, and has made with it several experiments, the results of which he describes, and from which it appears that when atmospheric pressure is increased by one half, the respiratory functions become more active, the pulse is fuller, and the brain is stimulated by an increased quantity of blood carried to it. On the contrary, when the pressure is diminished by one quarter, the respiration becomes difficult and oppressed, the skin is painfully hot, hemorrhage supervenes, and the patient becomes lethargic. M. Innod reports three cases in which the above principles were successfully applied to the treatment of nervous affections and dyspnæa.

Hydrophobia.—Among our selections will be found one with the startling, but agreeable title of "Rabies not communicable by bitten animals;" in which the author M. Augustin Capello of Rome brings forward a series of experiments, strongly confirmative of his opinions upon this highly important point. Indeed, it seems difficult in any other manner, to account for the comparatively few cases of Hydrophobia that occur after the bite of rabid animals. And it would be otherwise difficult to tell how it happens, that the disease is not propagated ad libitum, if every animal that is bitten and becomes mad, has the power of imparting the disease to others. Fifteen or twenty may be bitten by one rabid animal; and a good number of them become mad; when, did each impart the disease in turn to a like proportion, we should soon have the earth depopulated by this single incurable disease. We think the subject a most important one, and hope that experiments will be made by such of our readers as may have opportunities for the purpose. For there is, perhaps, no situation more pitiable than that of a man who has been bitten by a dog known to be mad;

none, in which the feelings of the unfortunate's friends are so dreadfully racked; and consequently very much of human suffering would be averted, by the knowledge of the fact of the rabid animal, that bit him, having had a communicated, and not a spontaneous disease, and therefore incapable of imparting it to others. Independent of this too, very severe operations, of excising parts bitten by a rabid animal, have been performed, especially upon the faces of children, which might have been avoided if, as we before said, it had been known, that the disease of the animal was not spontaneous but communicated, and consequently that he could not impart the disease. We trust that this subject will be taken up by our professional brethren, as it ought to be.

Westminster Hospital.—This institution has been removed to a new building, opposite to Westminster Abbey, capable of containing 250 beds. The former building could, at the utmost, accommodate not more than 100. Of course the same medical officers that attended the old Hospital continue to attend the new. They seem to agree with each other as well as they formerly did; as well as they have ever done, in fact, since Mr. Guthrie joined the hospital. For some cause or other that gentleman does not *get on* with the other Surgeons, nor with the Physicians. He has lately, in conjunction with some others, of no great note, set up a new school of medicine which they call the "Westminster Hospital school of Medicine" and, supported by the Treasurer, wished it to be considered as a connexion of the hospital. This, however, the Governors refused, and so for the present it stands on its own merits alone.

Sir George Tuthill and Dr. Roe, however, with the sanction of the medical officers of the hospital, are about to organize another "Westminster Hospital school" which is to be opened in spring. Of Dr. Roe we now know nothing, but in our time, he was looked upon as an able young physician. Sir G. Tuthill we remember as a veteran lecturer of the Cullen School of Medicine, and the Linnæan School of Botany. He lectured also upon Chemistry; and his lectures in that science were considered as calculated to ground a pupil well, so far, at least, as Pharmaceutical Chemistry was concerned. The colleagues of Sir George Tuthill and Dr. Roe are intended to be, as it is said, Mr. Liston of Edinburgh, on Surgery; Dr. Blundell on Midwifery; Mr. Malyn and Mr. Mackenzie, lecturers, and Mr. T. R. Jones, demonstrator, on Anatomy; Mr. Kemp, on Chemistry, and Dr. Clendinning, on Medical Jurisprudence; so that if the school fail, it will not be at all events for want of talent.

Mr. Liston.—This gentleman's removal to London takes place at an auspicious time: and we have no doubt, that he will add to the list of those worthies, who have, from time to time, come up from the north, to gain well earned fame and fortune in the metropolis. There is (now that Sir Astley Cooper is retired,) no Surgeon in London removed far beyond the rest as an operator; the field is therefore open, and we look forward confidently to its being worthily taken possession of, by the subject of the graphic sketches by Scotus and Edinensis, in a former number of this journal. Dr. Blundell is another of the great props of the new school. He has retired from the hospital, where he so long lectured, on account of some unpleasant differences between the treasurer and himself; arising, it would appear, out of some impertinent medling with Dr. Blundell's lectures, and attempting to force upon him a partner. Dr. Blundell was too much of a man of spirit to submit to this, and he has accordingly resigned the chair in the hospital—a circumstance not much, it is to be supposed, either to the credit or profit of that institution. But, as our readers may have seen above, the public is not likely to lose the benefit of his admirable talent, in the giving of instruction in obstetric science.

College of Surgeons.—Another most improper regulation of this college has been issued: we give it below. The document speaks for itself.

"*Notice to Hospital Surgeons; Royal College of Surgeons in London, 28th October* 1834.

In order to verify the certificates presented by candidates for the Diploma of the College, the surgeons of all recognised hospitals are requested to transmit to the Secretary, on the 1st of November, the 1st of February, the 1st of May, and the 1st of August in each year, or as soon after as possible, a quarterly return of the students attending the same, noting the dates of entry, and the periods for which they have entered, together with any remarks as to attendance, absence &c., according to the form, herewith enclosed, and which will be furnished by the College on application to the Secretary."

(Signed) EDMUND BELFOUR,
Secretary.

A notice to the same effect as the preceding has been issued to lecturers.

Notice to Surgical Students; Royal College of Surgeons in London, 28th October, 1834.

It is expected by the Council of the College, that the following regulation be attended to by all students coming to London for any part of their education, and with the ulterior view of becoming candidates for the Diploma of the College.

REGULATION.—Every student, on the commencement of his education in London, is desired to present himself at the College, to register his name, together with the documents of his previous studies; at which time he will be required to produce evidence, satisfactory to the court of examiners, of having entered into those studies which are necessary for the completion of his education; and credit will be given for attendance on hospital practice or lectures in London, only from the date of such registry.

EDMUND BELFOUR,
Secretary.

What can it signify to the examiners, or to the cause of medical science, if one course, or if ten courses of lectures, on hospital practice, &c. &c. were attended by the candidates? So that he possesses the necessary knowledge, what matters it where, when, or how that knowledge was obtained?

GENERAL ORDERS RELATING TO THE MEDICAL SERVICE.

GENERAL ORDERS BY HIS EXCELLENCY THE RIGHT HON'BLE THE GOVERNOR GENERAL OF INDIA IN COUNCIL.

5th March 1835.—Assistant Surgeon Ebenezer Mitchell, of the Medical Department is permitted to proceed to Europe, on Furlough, on Medical Certificate.

Assistant Surgeon Thomas Curry Elliot, to the Medical Charge of the Political Agency at Mehidpore, in succession to Mr. Simson promoted. Mr. Elliot's Salary is fixed at the consolidated amount of Sonat Rupees (500) Five hundred per mensem for all charges Civil and Military.

Surgeon John Turner, of the Medical Department, Surgeon to the Governor General and to the Presidency General Hospital, is permitted to proceed to Europe, on Furlough, on account of his private affairs.

11th.—The undermentioned Officer is permitted to proceed to Europe on Furlough, on Medical Certificate.

Superintending Surgeon Thomas Tweedie, of the Medical Department.

Surgeon George Skipton, 3d Member of the Medical Board, is permitted to proceed to the Cape of Good Hope, on Medical Certificate and to be absent from Bengal on that account for two years.

The Order passed in the Political Department under date the 21st January last, placing Assistant Surgeon W. B. Davies, attached to the Civil Station of Gowahutty, at the disposal of His Excellency the Commander in Chief, was cancelled in that Department on the 11th instant.

13th.—Assistant Surgeon Robert Bakewell Cumberland, to the Medical duties of the Civil Station of Midnapore, vice Goodeve.

Assistant Surgeon Charles Newton, to the Medical duties of the Salt Agency at Tumlook.

The undermentioned Medical Officers are placed at the disposal of the Honorable the Governor of Agra:

Surgeon James Graham, M. D., for temporary employment.

Assistant Surgeon William Peter Andrew, M. D.

Assistant Surgeon Henry Roe, attached to the Civil Station of Tipperah, is placed at the disposal of the Commander in Chief.

No. 68 of 1835.—The Right Hon'ble the Governor General of India in Council is pleased to resolve, that the appointment of Superintending Surgeon at Berhampore, from which Station the European Troops have been withdrawn, shall be abolished, and the duties transferred to the Superintending Surgeon of the Barrackpore Circle.

His Excellency the Right Honorable the Governor General of India in Council has been pleased to appoint Mr. Bayfield, an Assistant Surgeon on the Establishment of Fort Saint George, to be Assistant to the Resident at Ava, in addition to his Medical duties.

17th.—The Right Hon'ble the Governor General of India in Council has been pleased to make the following Appointment:

Mr. Surgeon J. R. Martin to be Medical Officer to the Government Insurance Office.

20th.—No. 80 of 1835.—The following Appointment made by the Honorable the Governor General of India, is published in General Orders:

Surgeon J. Rankin M. D., to be Surgeon to the Governor General.

23d.—In conformity with the Resolution of Government passed in the Revenue Department, under date the 13th instant, Assistant Surgeon John McClelland is appointed an Assistant to Dr. Wallich ordered on Deputation to Upper Assam.

Surgeon H. Clark, First Assistant to the Behar Opium Agency, has obtained, in the General Department, under date the 7th instant, an extension of leave granted to him on the 1st December last, from six to twelve months.

30*th*.—3. "Assistant Surgeon William Fullarton Cumming, late of your Establishment, has been permitted to retire from the Service on Lord Clive's Fund. His retirement takes effect from the 23d September 1832."

Surgeon Simon Nicolson to be Surgeon to the General Hospital, vice Turner proceeded to Europe.

Assistant Surgeon Thomas William Burt, to the Civil Station of Tipperah, vice Roe placed at the disposal of the Commander-in-Chief.

4*th April*.—No. 88 of 1835—Assistant Surgeon Alexander Smith, of the Medical Department, and attached to the Civil Station of Jessore, is permitted to proceed to Europe, on Furlough, on Medical Certificate.

6*th*.—No 89 of 1835.—To remove existing doubts the Hon'ble the Governor General of India in Council is pleased to notify, for general information, that a vacancy in the situation of Superintending Surgeon at any of the Presidencies is to be filled up agreeably to the rule laid down by the Hon'ble the Court of Directors, by the Surgeon who stands first in regular succession to the appointment, whether such Surgeon be present or absent, provided, in case of his absence from his Presidency, that he be not on Furlough to Europe, and shall have proceeded with leave, on Medical Certificate, for the recovery of his health, to any place, Settlement, or Colony, where he retains his claim to Indian Allowances.

When an absent Medical Officer succeeds to the situation of Superintending Surgeon, the Surgeon on the spot who may be appointed to officiate for him, is to receive the whole of the staff Salary, the Absentee not being entitled to any portion thereof until he returns and takes charge of his appointment.

General Orders by the Right Hon'ble the Commander in Chief.

7*th March* 1835.—Assistant Surgeon J. G. Vos, M. D., late officiating Civil Assistant Surgeon at Bandah, is directed to do duty under the Superintending Surgeon at Benares.

10*th*.—46th Regiment Native Infantry—Assistant Surgeon Andrew Vans Dunlop, M. D., from 13th February to 13th August, in extension to remain at the Presidency, preparatory to applying for permission to resign the service.

11*th*.—The Cawnpore Division Order of the 26th ultimo, appointing Veterinary Surgeon J. Hough, of the 7th Regiment Light Cavalry, to receive charge of the Horses of the 5th Light Cavalry, from Veterinary Surgeon D. Cullimore, of the 2d Brigade Horse Artillery, who is relieved from that duty, is confirmed.

13*th*.—The Cawnpore Division Order of the 2d instant, appointing Assistant Surgeon A. Mackean, late in Medical charge of the 70th Native Infantry, to do duty with the 5th Regiment Light Cavalry and Assistant Surgeon A. Chalmers, M. D., to receive Medical charge of the Magazine Hospital, until further orders, is confirmed as a temporary arrangement.

14*th*.—The Sirhind Division order of the 26th ultimo, directing Assistant Apothecary G. Hardtman, attached to the Hospital of His Majesty's 31st Regiment, to proceed from Kurnaul with the men selected for the Convalescent Depôt at Landour, is confirmed.

Mr. Hardtman will act as Apothecary to the Depôt, until further orders.

14*th*.—The General Order of the 8th November last, directing Assistant Surgeon K. M, Scott to proceed to Purneah, and assume the Medical duties of that Station, is cancelled.

18*th*.—The Artillery Regimental Orders of the 10th instant, appointing Lieutenant A. Cardew to act as Adjutant, and Staff Sergeant A. Creighton, of the 2d Company to act as Sergeant Major, to the Wing of the 1st Battalion at Dum-Dum; and Assistant Surgeon A. Bryce, M. D., to receive Medical charge of the Detachment, are confirmed.

49th Regiment Native Infantry—Surgeon J. Henderson, from 30th April to 1st November, to visit the Presidency, preparatory to applying for Furlough to Europe.

69th Regiment Native Infantry—Surgeon K. Macqueen, from 15th April to 15th November, to visit the Hill Provinces North of Deyrah Dhoon on private affairs.

19*th*.—Superintending Surgeon W. Findon, on the departure from Berhampore of His Majesty's 38th Regiment, will, with reference to Government General Orders of the 13th instant, repair to Barrackpore, and assume charge of the office of Superintending Surgeon at that Station.

Assistant Surgeon A. Walker (1st) is removed from the 40th to the 42d Regiment Native Infanty, which he is directed to join at Delhi, and assume Medical charge of.

Assistant Surgeon J. H. Serrell, doing duty with the 12th, is appointed to the Medical charge of the left Wing 53d Regiment Native Infantry proceeding to Bandah.

26*th*.—Assistant Surgeon A. Bryce, M. D., is posted to the 1st Troop 2d Brigade of Horse Artillery.

31*st*.—The Cawnpore Division orders of the 21st instant, directing Assistant Surgeon G. C. Rankin, arrived from Agra with the 2d Company 3d Battalion, of Artillery, to do duty with that Battalion, and Assistant Surgeon J. Murray, M. D., arrived from Meerut with the 3d Troop 2d Brigade, to receive Medical charge of the 3d Troop 1st Brigade Horse Artillery from Assistant Surgeon A. Crighton, M. D., who is to rejoin his own Corps, the 5th Regiment Light Cavalry, are confirmed.

The Meerut Division Order of the 20th instant, by Major General the Honorable J.

Ramsay, directing Apothecary John Douglas to proceed to Landour and do duty at the Depôt there, under the orders of Assistant Surgeon Robertson, is confirmed.

Assistant Apothecary George Hardtman, on being relieved by Mr. Douglas, will rejoin the Hospital of His Majesty's 31st Regiment at Kurnaul,

Apothecary Charles Fox is removed from the Hospital of His Majesty's 3d Buffs, and directed to proceed to Benares, there to await further orders.

Apothecary John Williams, doing duty with the 3d Troop 3d Brigade of Horse Artillery, is appointed to the Hospital of His Majesty's 3d Buffs, vice Fox, and directed to join at Ghazeepore.

1*st April.*—The Station order issued by Colonel R. Bartley, under date the 17th of February last, directing Surgeon French, of His Majesty's 49th Regiment, to afford Medical aid to the Staff and to the public Establishments at Hazareebaugh, is confirmed as a temporary arrangement.

Assistant Surgeon A. Drummond having returned to Hazareebaugh, will resume Medical charge of the Staff and public Establishment at that Station.

2*nd.*—The Meerut Division order of the 13th ultimo, appointing Assistant Surgeon C. McCurdy to the Medical charge of a Detachment of Convalescents proceeding to Landour, and directing him to afford professional aid to the Officers of the Civil and Military Services residing at Mussorie for the benefit of their health, during the present season, is confirmed.

The Meerut Division Order of the 15th instant, directing Hospital Apprentice Charles Krefting to accompany the Detachment of Convalescents proceeding to Landour, is confirmed.

3*rd.*—The Berhampore Station Order of the 7th ultimo, by Lieutenant Colonel H. Piper, appointing Hospital Apprentice John Richard Beezalt to act as Assistant Apothecary, and Assistant Steward to the Left Wing of His Majesty's 38th Regiment of Foot, during its march to Chinsurah.

4*th.*—The undermentioned Officer has leave of absence:

Medical Department—Assistant Surgeon H. Roe, from 13th March to 13th September, to remain at Tipperah, on private affairs.

7*th.*—The Cawnpore Division order of the 19th ultimo, directing Assistant Surgeon S. Winbolt to assume Medical charge of the Left Wing 53d Regiment Native Infantry, and Assistant Surgeon J. Hervey, of the 70th Native Infantry, to officiate as Civil Assistant Surgeon at Banda, vice Winbolt, is confirmed as a temporary arrangement, until the arrival at Banda of Assistant Surgeon J. H. Serrell.

The Cawnpore Division order of the 24th ultimo, directing Assistant Surgeon W. P. Andrew, M. D., to relieve Surgeon B. Bell from the Medical charge of the Civil Station of Cawnpore, and Assistant Surgeon J. W. Grant, Medical Store-keeper, to afford Medical aid to the Staff and public Establishments, from the date of Surgeon Bell's departure from Cawnpore, is confirmed as a temporary arrangement.

8*th.*—The Cawnpore Division order of the 27th ultimo, directing Assistant Surgeon S. Lightfoot, of the 15th Native Infantry, to afford Medical aid to the Staff and public Establishments at Cawnpore, during the indisposition of Assistant Surgeon Grant, is confirmed.

9*th.*—The Cawnpore Division Order of the 28th ultimo, directing Assistant Surgeon A. Mackean to repair to Seetapore, and receive Medical Charge of the 48th Regiment Native Infantry from Assistant Surgeon C. Newton, who has been appointed to the Medical duties of the Salt Agency at Tumlook, is confirmed as a temporary arrangement.

Assistant Surgeon S. Holmes is removed from the 3d, and posted to the 69th Regiment Native Infantry at Meerut.

Orders by the Right Honorable the Governor of Bengal.

11*th March,* 1835.—The Right Hon'ble the Governor of Bengal has been pleased to cancel the order of the 21st January last, placing Mr. Assistant Surgeon W. B. Davies, attached to the Civil Station of Gowahutty, at the disposal of His Excellency the Commander-in-Chief.

28*th.*—Doctor J. R. Vos, Police Surgeon, for one month, in extension of the leave granted to him on the 11th ultimo. Doctor W. Graham will continue to officiate for him.

3*d April.*—Mr. Alexander Smith, Assistant Surgeon of Jessore, for three weeks, in extension of the leave granted to him on the 27th January last, preparatory to his making application to proceed to Europe on Furlough.

Orders by the Hon'ble the Governor of Agra.

4*th March,* 1835.—Assistant Surgeon Charles Newton, of the 48th Regiment N. I., to be Civil Assistant Surgeon at Banda.

21*st.*—Assistant Surgeon William Peter Andrew, M. D., to be Civil Assistant Surgeon at Cawnpore.

26*th.*—Mr. D. Campbell, the Civil Assistant Surgeon of Mirzapore, has obtained leave of absence from his Station until the 31st of the present month, in extension of the leave granted him on the 23d December last on private affairs.

TO CORRESPONDENTS.

The following communications have been received since our last.

Case of Malignant Tumour, by C. W. Fuller, Esq.

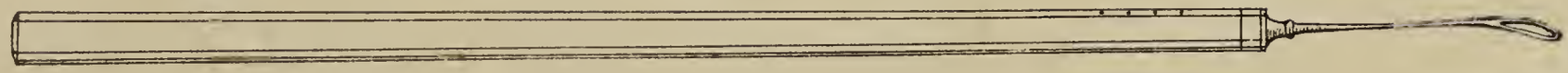
Report of cases of personal injury, to the Magistrate of Azimghur, by J. Esdaile, M. D. C. A. S.

Case of Idiopathic Glossitis, by T. C.

Case of Cholera treated on the Emetic plan, by G. Evans, Esq.

Vindex on the Genus Clorhynchus.

Grinding, or the Wisdom of our Ancestors.



Mr. Raleigh's instrument for depressing the crystalline Lens in the "modified oriental" operation of Couching, as described at Page 141 Vol. VI. of the transactions of the Medical and Physical Society of Calcutta.

THE INDIA
JOURNAL OF MEDICAL SCIENCE.

VOL. II.] JUNE 1, 1835. [No. XVIII.

ORIGINAL COMMUNICATIONS.

SKETCHES OF THE EDINBURGH MEDICAL PROFESSORS.—No. V.

Dr. Alison.

If I shall not make this sketch an interesting one to the readers of the *India Journal of Medical Science*, the fault will assuredly lie in my own pen, not in the subject which I have chosen for it. In painting the features of external nature we find a facility in hitting off the strongly marked features of the landscape, so in sketching human character are the broad traits of the moral and physical easily drawn; but to place each part of the picture in its proper place, to connect the various units into an harmonious whole, by the strokes of the pencil or the pen, are the points of difficulty.

If questioned why I think so, I do not know that I could give very good reasons for thinking Dr. Alison the most enlightened physician in the metropolis of Scotland. Is it because he is deeply read in the literature of his profession? Dr. Duncan, Junior, was more than his equal in that particular. Is it because he is a profound scientific pathologist? Dr. John Thomson meets him on that ground. No it is not for any individual acquirement that I yield him the high distinction but for the profession of all the attainments that become his situation, and for a personal character, that would do honor to human nature in any age or country, a high-mindedness, a benevolence, a philanthropy, a good will to all men that can only have one source.

Dr. Alison is the son of the eloquent writer of the Essays on Taste. His relationship to Dr. Gregory was probably the cause of his studying medicine, and it was probably the same circumstance which led him to hope for distinction in the walk he had chosen, and to merit it by application and study.

A mind like his, once feeling its own power, is not likely to fall back to the routine of every day occupation. Dr. Alison, though disappointed at first in the hope of succeeding to a professorship, has never receded from the public notice, and he is now, I believe, ably filling one of the chairs in the University.

In his personal appearance there is nothing very striking. He is tall and awkwardly made—receiving little adorning from his tailor. The features are large, heavy looking and void of expression. The doctor's-gait is exceedingly awkward. In progressing one side of the body seems moved by a separate moving power—acting independently of the other, and the toes point out in the most unseemly manner.

I have said nothing as yet to justify the high praises which I have bestowed upon Dr. Alison. I claim the readers' company to the clinical wards of the Infirmary and then to the dark Lecture room in the University, noted as the class room of old Dr. Andrew Duncan. In the first mentioned place Dr. Alison is distinguished by the earnest attention he pays to the cases before him—by the pointedness and shrewdness of his professional questions, but above all, by the kindness and urbanity of his manner to those whose chief claim upon him lies in the benevolence of his own excellent heart. The bland smile and the graciously put question receive in the chambers of the rich their mercenary, their pecuniary reward; but the reward which comes from the sick-bed of wretchedness and from the wards of indigence is to a man of Dr. Alison's feeling, above all pecuniary valuation. Dr. Alison's treatment of the various diseases which the clinical wards presented it would be tedious to notice—even if I could at this distant time bear in mind his system of treating every individual disease. It will be sufficient to mention, perhaps, that I think he was less bigotted to theories than his colleagues, treating disease more after symptoms than after names. In fever, this was particularly the case. And how strange it is to think that in a disease like fever, attacking all ages, sexes, temperaments—invading all organs and every texture, one line of practice should be laid down by every man as infallibly correct. It is this dogmatism in medicine that is the stronghold of quackery. Dr. Alison's clinical instruction was highly appreciated by the students. In diseases of the chest, one did well to watch his practice, above all, his diagnostic and prognostic inferences from the

stethoscope, I think, I have not known a physician whose practice showed more shrewd observative, or more profound professional knowledge. In the Clinical Lecture room, Dr. Alison was, I think, unrivalled at the time I studied in Edinburgh. His remarks upon the particular case were so apposite, then, his application to it of his experience, and of his theoretical knowledge was so convincing, and so logical; and with all this flood of learning and practical instruction there was so little attempt at display—so little of mystery in the application of theory to practice—so much of sound sense—and of real utility that you could not avoid feeling, that you had learnt something worth remembering, and that study and observation, applied to the doctrines of medicine by the true logic—the induction from facts, must meet with its reward.

A sketch of Dr. Alison cannot well be concluded without doing a little more than alluding to his philanthropy. He is a true Samaritan, pouring the oil into many a wound. To speak in plain English there is not one man in the whole city that does more acts of charity: you will meet him in the very sinks of wretchedness, administering to the sick, expecting but one reward; but that, the greatest to him who can feel it—the approval of his own heart.

SCOTUS.

ON THE SUPPOSED FORMATION OF FAT IN THE HEART.

To the Editors of the India Journal of Medical Science.

Dear Gentlemen,—With reference to my note to you of the 10th December last, on the "supposed formation of fat in the heart," I beg leave to trouble you with the following portion of notes made at a post-mortem examination, about a month ago. It bears upon the subject of that note, and I think tends (to the extent of an additional instance) towards verifying the opinion, against the fatty nature of those formations, found in the cavities of the heart.

The subject of my dissection was a horse belonging to one of the gentlemen of the residency, aged 14 or 15 years, of healthy constitution from his birth, and known to me as such for nearly three years. After exposure to a cold wind, when much heated from exercise the animal appeared suddenly and violently indisposed. A course of treatment was adopted and pursued, having reference to such a diagnosis as amateur veterinarians are generally able to make. Suffice it to say that he was supposed to be afflicted with inflammation of the bowels, was largely bled, had purgative medicines, and died 30 hours after his illness became manifest. During the last 6 or 8 hours of his life, the action of the heart was very feeble, and the prostration of strength such, as to prevent his keeping other posture, than on his side, his legs and head stretched at full length from the body.

I examined the body 12 hours after death, and found that mortification of the small intestines, with hepatization of one of the lungs, gave sufficient cause for his illness and death. "The pericardium and heart are perfectly healthy in appearance, the left ventricle is about half filled by an amber coloured fatty looking substance, the edges of which are semi-transparent and jelly-like: pressure communicates a feeling of slight elasticity, and protrudes a few drops of serous looking fluid; there is no investing membrane to the mass, nor any appearance of its containing vessels, and its connection with the walls of the ventricle is merely that of contact, without the intervention of vessels or other attaching substance." "The right ventricle contains a substance similar, in all respects, to that of the left, except in being not more than half the size."

I have no remarks to make on the above appearances save that the animal in which they were found, was not by any means a fat one, that his invariable good health, and the constant work he performed for *ten* years, without being "sick or sorry," almost precludes the possibility of the formation of the substances found in the cavities of the heart, during the active and apparently healthy portion of his life, which, be it observed, continued up to 30 hours previous to death. It is fair, I think, to infer that these formations had their origin and completion, either after death or during the 6 or 8 hours previous, when the vital power was on a very small scale.

It is much to be regretted that our veterinary brethren do not adopt your Journal as a medium of communicating some useful hints to the public. Every man who has a horse feels bound to treat this favorite animal when sick, yet the aid is nine times out of ten, as likely to kill as cure. "Gripes," and "Staggers," compose the Nasological list of most of us with reference to acute ailments (the only ones of real moment) and we are about equally divided, on the best mode of treatment: bleeding and purging is the creed of one half, brandy and the strongest stimulants of the other. I am, &c.

A. CAMPBELL.

Nipal, 8th Feb. 1835.

Note.—We hope our veterinarian brethren will comply with the suggestion contained in Dr.

Campbell's last paragraph. Our pages are open to the science of healing in all its branches. — *Eds. In. Jour. Med. Sc.*

CASE OF MALIGNANT TUMOUR.

Jan. 5, 1835.—A native, apparently about 41 years of age, presented himself this morning, requesting medicine for a tumour. I told him that the only remedy was the knife, to which he very readily submitted.

The tumour was situated to the right of, and in a line with, the nipple of the left breast; it's surface, before excised, was about as large as the upper circle of the breakfast tea cups now generally used, fissured deeply throughout, having also a fetid discharge; the patient described his sufferings as very great, no rest at night, more or less pain at all times, and occasionally, bleeding very freely. I also remarked some tolerably large, dark veins ramifying on the surface of the skin, about the base of the tumour.

The operation was simply a circular incision, beginning at the lower part first; and enclosing a portion of the dark areola of the left nipple. The tumor appears to have been superficial, as it was only slightly connected with the pectoralis major muscle, by a small net-work of dark red vessels. No arteries required tying. I performed the operation under a tree, and the wind being fresh and cool, proved styptic enough. Dressed the wound with dry lint, simple cerate, and a bandage.

On Wednesday the 7th, the wound was redressed with basilicon, slight compress and bandage; this dressing was continued daily.

The man took a little purgative medicine once after the operation and was restricted slightly in his diet during the first two days. He had, however, a haggard and rather anxious look from the first, but, he said, that he considered himself getting well, as he could now sleep soundly at night, and all that he had to complain of, was a want of appetite. This I attributed, as a probable consequence of the recent operation; the wound too, notwithstanding his general appearance and loss of appetite, had assumed a very healthy aspect; and the pus, secreted on the surface of it, was thick and of a straw colour.

Matters were in this state on the Saturday morning following the operation when, during the night he was taken *suddenly* ill, complaining of excruciating pain in the bowels and great thirst with a sensation of sinking. This took place in the middle of the night, the native doctor did all he could, such as fomentations &c, and he also gave him a full dose of compound Jalap powder, which had no effect. He died early in the morning shortly before I saw him.

Post mortem examination took place three hours after his death. On cutting into the abdomen, I found a considerable quantity of serum effused; and the whole of the intestines were, to use a familiar phrase, glued together, requiring a moderate force to separate them; general inflammation had taken place, particularly of the small intestines; the medicine, as well as the fluid he had taken, had escaped into the cavity of the abdomen. I found the inner or mucous coat of the stomach pale, but much thickened; and just where the pylorus verges into the duodenum, on the lower part, I found a rugged edged ulcer, which had penetrated; it was large enough to put the tip of the little finger through. This, of course, accounted at once for his sudden and unexpected death.

On further examination, I found the mesentery glands enlarged; one tumour was as large as a small egg, the others less. A considerable quantity of fat was attached to the omentum and large intestine; and from the general appearance of the poor man, it was evident that he had lost much flesh.

C. W. F.

Kishnaghur, 26th March 1834.

GRINDING, OR THE WISDOM OF OUR ANCESTORS.

Professor. Quid est creare, Domine?
Candidate. Creare est facere aliquid, ex nihilo.
Prof. Recte respondisti, Domine—ergo, creo *te* doctorem—*Scholastic Examination.*

Dear Gentlemen,—I perceive by looking at your names, on the *integument* of your journal, that you are so unfortunate, as not to have attained "ad summas honores," in your profession. If you will afford me space, I may perhaps succeed in blunting the pungency of your regrets, and in assuaging the envy with which you must naturally regard your titled, and more fortunate brethren, by describing faithfully, the studies, and kind of knowledge, by which "The Highest Honours" were obtained from the University of Edinburgh in 1829. Let us suppose that the medical student has entered upon the 4th year of his Academic Curricus; that he has paid the prescribed number of guineas, for which the dozen sciences are sold, whose condensed essence is centred in the mystic affix M. D., and that he begins to tire of taking notes of lectures, and paying fees, and longs to take £1 notes, and pay visits in his carriage instead, and to read his

name from the opposite side of the street, on a brass plate, between a *day* and *night* bell: To reach this consummation, so devoutly to be wished, the more surely, it is necessary to become an M. D. But he might study, and languish for a lifetime, before his unassisted efforts procured him the object of his ambition. Our ancestors of the Wig, and Gold-headed Cane, well knowing the power of what is now irreverently called "humbug," over the public mind, and jealous of a too promiscuous approach to £1—1; wisely guarded the aveuue to it, by formal and imposing examinations in a dead tongue. Fortunately for the young aspirant, there are men of talent, who seem born at war with fortune, who are never shaken, even by accident, into their proper place; relying too often on their real worth, they reap penury, and neglect: *They* cannot compete for public favour, with "The Pills," nor obtain by their fashionable assurance, the "entrée" of My Lady's chamber, and the honor of physicking her lap-dog; to obtain daily bread, they are forced to act as guides, and pioneers to younger and more ignorant men—to be their rail roads to that "El Dorado," whose honours and riches they may only behold afar off: These obscurely useful unfortunates are aptly enough denominated *Grinders;* it being their duty, to *sharpen* up the intellectual sword of the Candidati, against the dreaded day,

"When *Professors* shall meet them in battle array."

My reluctance was great, to submit my cerebrum to the grind-stone, and when urged to it, I felt disposed to give Canning's answer to the knife-grinder; "I give thee six pence! I'll see thee d—d first." My friends however, conjured me by Esculapius' cock, and all my hopes of wearing his velvet cap, not to secure my rejection, by a self-will'd dependence on the careful study of the best authors; as the 20 Latin folios of Helvetius, was the text-book recommended by one professor; and all the examiners had their favourite puzzles, which the *grinder* alone was Œdipus enough to unriddle. Convinced against my will, I reluctantly winded my way to Dr. Milligan's work-shop, one winter evening; the learned man's abode adjoined his fellow-craftsman McLeod the cutlar's shop, in College Street. Having penetrated a *close*, ascended five flights of stairs, in spite of Stygian darkness, and encountered "all the smells the nose is heir to," I at last reached Dr. Milligan's *flat*, and was ushered into the doctor's parlour, by the *lass*, without being announced. Before being able to penetrate the darkness, made scarcely "visible," by the glimmer of a single tallow candle, nearly extinguished by it's length of *snuff*, I became aware of the presence, and employment of this scientific omnibus, by a sonorous and regular snore, proceeding from a dark mass, in the *fire neuk;* an occasional flicker from the fire, discovered an empty decanter on a small table—the Dr. "Vino, ciboque, gravatus," was enjoying his afternoon nap. After having hemm'd, through every note in the gamut, to no purpose; a sudden *falsetto* seemed to have penetrated his tympanum, for he awoke exclaiming, "Eh! what *Jeanie?* have the blockheads come?" I made him aware of *my* presence; upon which, profusely apologising, he snuffed the candle, and displayed to view a large, obese person, with heavy features, and sodden complexion, but "*sagawcious*" withal. My errand was soon told, and the fee pocketed, and I was taking leave, when he said, his first class would assemble in a few minutes, and I might be at once initiated into the mysteries of *grinding*, if I chose. The ascending fumes from cigars, and meerschaums, and the giggling of the *lasses* on the stairs, soon evidenced the approach of the "*Gradawuts;*" about a score were soon seated round the room, and the doctor preluding with a yawn, which was responded to all round, proceeded to question his pupils on their proficiency in Anatomy, Physiology, Theory and Practice of Medicine; Midwifery, Chemistry, Botany, &c.; he had generally to answer his own questions, however. The more pert, and assured part of the audience, who had easily pick'd up *dog-Latin*, from never having known any other kind, occasionally prevented the examination from being a Monologue, by replying to the Doctor's queries, in a language, which if not *the unknown tongue*, equally served the purpose of concealing their no meaning, and no ignorance: From the frequent repetition of Latin-like terminations, I began to suspect, that "the learned Thebans" supposed they were using the language of Cicero—Priscian's head was crack'd like a walnut, in a most reckless and heartless manner. The exhibition was so far interesting to the Philologist, as it shewed the corrupting process, by which the moderns rendered an antient language no longer recognisable. Disgusted at being crammed like a turkey for Christmas, I thankfully made my escape at the termination of the hour, and never again was seen in Dr. Milligan's *grinding* studio. My fastidiousness, however, was nearly seriously punished, for on the day of trial, the professor of Materia Medica nearly rejected me; a disgrace which a course of grinding would have saved. The learned doctor desired me to enumerate "the rubefacients;" this I did, to the best of my memory, but

the professor was not satisfied; "I had omitted something of importance." Another drug was mentioned—and another; still the doctor shook his head, at last I confessed my ignorance. You will long look gentlemen around the Company's Stores, without finding what the doctor wanted; we are not allowed "*Centipedes!*"* though they are to be found in the Pharmacopœia Edinensis, edited by Dr. Duncan, junior. Another subject was introduced, "Nunc de Iodina, dicendum est domine; ex Iodina macula, per longum, an breve tempus manet? After making Iodine ointment, I used to have some difficulty in washing my hands clean again; I therefore pretty confidently responded, "Per longum tempus manet domine."—*Non*, domine, thundered the professor, *Non!* per *breve* manet:" Not another question was asked about Iodine, and I gave myself up as a lost man. Whoever may have been annoyed by the frivolous questions of this gentleman, and confounded by the peevish, and unintelligible Howe, will remember with lasting pleasure, the fair, and practical examinations of the gentlemanly, and assuring Monro, and stately, but considerate Hope, the manly and indulgent Graham, and the mild, and benevolent Alison; these gentlemen almost invested this barbarous farce, with a halo of their own dignity. These things are still better managed at Cambridge, where the *degree* may be obtained without ever having attended a Hospital, or Medical lecture. It is a subject of gratulation to our profession, and the public, that what has been described is now all changed; ignorance can no longer make a cloak of learning, and stupidity be passed over, as "want of confidence in a dead tongue"; and if our successors obtain "the Highest Honours," with greater difficulty, than we did—they will also wear them with greater honour. Let me congratulate one of you, gentlemen, on the share you have had in effecting the destruction of *grinding* in India: After reading the report on Native Medical Education, who can doubt, that the late Medical Institution, was a deeply organised system of *grinding*.

The lists of examination questions, for Native doctors, given in the report, are excellent specimens of the "*Centipede*" school of medicine: Like another Saint Patrick, I hope you have banished the Vermin for ever.

Your obdt. servt.

E———.

P. S. I implore your devils to pay more attention to my Cacography; they make most malignant *adulterations*, as Mrs. Malaprop would say.

* "*A Bazaar article.*"—Eds.

TREATMENT OF CHOLERA BY EMETICS.

To the Editors of the India Journal of Medical Science.

Dear Gentlemen,—Having noticed in the last number of your journal that common culinary salt given in large doses had been attended with success in several cases of cholera; I was induced (on being called up hastily at 3 o'clock this morning to see one of my own bearers who had been attacked with cholera) to have recourse to its aid, as being a remedy I had never tried, and one so easily procurable in cases of great emergency. The man it seems was taken ill about 11 o'clock on the preceding night, and had vomited, and passed several watery stools before I was summoned to attend him. On my visiting him I found his skin cold, clammy and shrunken. Face thin, hollow and haggard. Pulse so thread-like and feeble as scarcely to be perceptible, with insatiable thirst, a burning sense about the stomach, suppression of urine, and slight cramps of the inferior extremities: in fact, he was decidedly labouring under the usual concomitant symptoms of cholera morbus, though not in its most frightful form. As no time was to be lost, I immediately procured three table spoonfuls of common table salt, and having dissolved it in half a pint of moderately warm water, I gave him the mixture to drink; with some reluctance he swallowed it, but as I anticipated, it was too nauseous and saline a potation for a sinking and thirsty man to relish or keep down, as was soon proved by its almost immediate return without affording him the slightest relief. I then had recourse to a remedy I have been in the habit of using for the last 12 years in my treatment of cholera cases, and from which I have witnessed the very happiest results. It consists in the simple exhibition of emetics of the sulphate of Zinc given in half drachm doses dissolved in a quart of warm water. To this man I gave three separate half drachm doses in the space of three or four hours, till the copious vomiting thereby produced had considerably abated the thirst and burning sensation at the stomach; which in the end it never fails to do if properly presevered in, as was the case in the present instance. The patient from this moment rallied, when the aid of a little brandy and water, to which half a drachm of carbonate of ammonia and some peppermint cordial had been added, so far recovered him as to place him out of all further danger from the present attack.

Being impressed with a thorough conviction, drawn from the best of all evidences, the post-mortem examinations of those

who have fallen victims to this Protean disease, that the immediate cause of cholera is a temporary suspension of the secretion of bile, as is also proved by the total absence of any of this fluid in the egesta per orem vel anum, and its absence again in the intestinal tube when opened. I can readily understand the rationale of the emetic mode of treatment. Vomiting in cholera, and whenever it occurs sympathetically as in some cases (uterine hœmorrhage, sickness after bleeding ad deliquum, for instance) I take to be a restorative process of nature, to bring round the balance and excitability of the nervous and circulating systems borne down and oppressed by some operating cause, and in cholera probably by the want or absence of that most essential of all secretions the bile, and unless this important secretion, the very main spring of the animal economy, can be re-established and that very speedily, no matter by what means or ends it is accomplished, the powers of life diminish and finally become extinct. I am so fully persuaded of the value and importance of vomiting and following up its action in these cases, that were I attacked with the disease (which Heaven avert) I would of all remedies place my sole and only reliance on its all saving efficacy. Any emetics will answer, even simple hot water in sufficient quantity to evacuate the stomach frequently will do, but I prefer the sulphate of Zinc to all others, because it produces decidedly less nausea, it does less harm to the stomach, it acts with much more certainty and with far less distress to the patient than tartar emetic, which often exhausts the excitability of the organ and leaves it in a state of atrophy very difficult to recover it from. The nauseating state is not indicated or required in cholera, on the contrary it must be injurious, it is the full concussion of emesis that is wanted to rouse into action the expiring spark of life, and set the secreting fountain free. At the time of administering emetics I usually apply a large mustard cataplasm to the præcordia, frictions and hot bottles to the feet, hands and extremities, and not unfrequently I make use of a small portable steam bath, when the powers of life are fast ebbing away; and when this is not attainable I find a good substitute in bags of bran made warm with hot water. In this way I have recovered many cholera patients apparently in a moribund state, and I would strongly recommend a trial of the plan to my professional brethren as one worthy of adoption. Where electricity is at hand it might be advantageously used, but my own experience does not enable me to speak of its effects in cholera cases.

April 12, 1835. GEO. EVANS.

VINDEX ON THE GENUS CLORHYNCHUS.

To the Editors of the India Journal of Medical Science.

Sirs,—As you have been pleased to publish, and ratify upon credit, my statement relative to the red-billed Erolia of the As. S. T. and Ibidorhyncha Struthersii of the century of Himalayan birds, I have procured permission to forward for your inspection the original description and drawing of my friend.

Since the date of discovery, or October 1829, my friend has been so fortunate as to obtain two more specimens of this remarkable bird; and, at my instigation, he has drawn from these materials a generic title and character, which I append, by his leave, to this letter. To my mind, the characters of the genus are somewhat vaguely as well as inaccurately proposed by Gould, whose generic name too is bad, as countenancing error. Whether the subjoined definition and title deserve the approbation of the learned, they will decide, with the aid of time. Meanwhile I would observe that my friend has been induced to slide into the too prevalent humour of setting-up new genera, solely by the discovery that Vieillot's Genus Erolia is subject to doubt, (English Regne Animal. Aves. III. 381,) and that Cuvier's Falcinellus, if it be not in the same predicament, yet will not suit our bird. You will perceive that in the rough copy of my friend's description and of his drawing, the Genus of the bird was originally indicated with a note of interrogation, and the words, 'Genus new,' added in the form of quære. In forwarding the fair copy and delineation to Calcutta, he postponed these doubts to respect for Vieillot's authority. The objection of Gould's newly proposed generic *name* of Ibidorhyncha or Ibis-billed is, I conceive, a valid one; namely, that it goes to confound the established distinction between the Ibises and the Curlews. The bill of our bird has neither the entire sulcation, nor the thick, squarish, base, characterising that of the Genus Ibis, and serving principally to separate it from Numenius. Are we to get up new genera, and by their very titles lead astray, at the same time that we confuse priorly established distinctions?

To Gould's generic *character* may justly be objected the omission of those diagnostic traits of the bill which are set forth in the subjoined character, and which it must be acknowledged are pointedly distinctive and contradistinctive. But for them, indeed, the bill of Clorhynchus would be absolutely identical in every respect with that of Numenius, to which the general and particular resemblance is so strong as to

have suggested (with Gould's *misnomer*) the generic appellation now proposed by my friend. Gould introduces the mention of the tail and wings of our bird into his generic character. But there is nothing in the least essentially characteristic in these members of our bird, which strictly resemble the same members in the majority of the Grallatores. The circumstance however of the first quill of the wings being rather shorter than the two next, is, in some subordinate respects, significant; and is vouched by two out of three of my friend's specimens (the third has the first remex longest) as well as by Gould's. Yet I cannot admit the sufficiency of this circumstance to justify Gould's, 'Alæ subelongatæ subgradatæ. The wings are very ample, extending to the end of the tail; and the difference in length between the first and the second and third quills, exceeds not the *sixteenth* of an inch; besides being pos sibly, not an invariable relation. Snipes and woodcocks, in full plumage, constantly exhibit this state of wing, though it is generally and justly allowed that 'first quill longest' is the character of their wings.

Gould's mention of the nares and nasal fosse of our bird in his generic character, is quite vain; because in these features the new Genus is identical with Numenius, and with *several* other genera of waders. Gould likens the feet of our subject to those of Hæmatopus. In some points of strict detail the comparison is just. But in the marked inequality of length between the lateral toes, and in the depressed, truncated nails, when joined to the shortness, stoutness, and full rough soles of these members, I see (with my friend) a greater characteristic resemblance to the feet of the typically cursorial and most anomalous division of the Grallæ. My friend's new generic title of Clorhynchus (by contraction for Clorionrhynchos: Clorios a greek name for the Curlew) has suggested the propriety of a new *specific* appellation, from the difficulty of turning the original one of red-billed into Latin or Greek, without translogical intrusion on the designation of the Genus. The large black crescent across the breast of our bird, in figure and position resembling a gorget, has therefore led him to christen the species, Strophiatus, or the gorgeted.

The following particulars relative to the *habits* of the gorgeted Clorhynx are quite new, and are some of the fruits of my friend's curiosity, as directed to higher matters than nomenclature. This species is 16 inches long by 30 wide, and about 10 oz. in weight. The intestines are 20 inches long; larger above than below; tough; frequently semi-convolved, or doubled syphonwise; and, at three inches from the anal extremity, they have two cœca, each nearly two inches in length.

The stomach is small but very muscular and gizzard-like, suited to the habits of the bird in respect to food, which it derives chiefly from very minute univalve mollusca, whose shells the gizzard of the bird is enabled, with the aid of gravel, (a considerable portion is always found in the stomach) mechanically to destroy. The nature of the aliment of the bird is strongly indicated by its fishy smell.

The gorgeted clorhynx is merely a momentary passenger in the hills: but it frequents the plains of India throughout the cold season. Its habits in respect to its fellows seem to be solitary: and its usual haunts are the sandy banks of streams and rivers.

Ordo—Grallæ. Fam. Longirostres? Cuvier.

Ordo—Grallatores. Fam. Charadriadæ, Vigors.

Genus--Clorhynchus (nobis)

Character Genericum (nobis).

Rostrum omnino Numeniacum; differt tamen tomiis inflexis denticulatisque, necnon apicibus acutiusculis.

Corporis, alarum, caudæq. forma, sicut in Grallatoribus typicis: remiges 2. 3. equales. primis. paululum longiores.

Tibiæ et tarsi sub breves: tibiæ trans—medium plumosæ, teres: tarsi, leviter reticulati.

Pedes typice cursorii, marginibus tamen digitorum subdilatatis, externoq. digito libero.

Icon. Red-billed Erolia of the Asiatic Society's Transactions.

Formam præbet hoc genus mire equidistantem inter typicos et antitypicos Grallatores—rostro, his—pedibusq., illis, connexam. Ordine naturali dispositum esse debet hocce genus ad finem pressirostrorum Cuvierii; unde ducens, cum Hœmatopo et Falcinello, ad Longirostres ejusdem auctoris, per genera Himantopi, Numenii, Ibidis, necnon Limosæ, Recurvirostræq.

Species nova. Clorhynchus Strophiatus (nobis) Anglicè. Gorgeted Clorhynx. Cl. corpore suprà colloq. plumbeis; cauda pallidiore, fasciisq. subnigris transversim instructa; corpore subtus albo; capitis vertice, facie, gutturcq. nigris, albo variegatis; pectore strophio nigro ornato; iridibus rostroq. sanguiniis, pedibus, purpurescenti-griseis.

Synomyma. Red-billed Erolia.

Ibidorhyncha Struthersii.

I am, Sirs,

Faithfully yours,

VINDEX.

HOSPITAL REPORTS.

BY MR. RALEIGH.

In Bengal, the early part of the cold season is usually accompanied by the prevalence of visceral, organic, and functional derangement, the sequelæ of fevers or other debilitating diseases of the hotter preceeding months, such as tumidity of the spleen, enlargement of the substance of the liver, torpidity or irregularity of its functions; diarrhœa, &c. All of which class of affections are at first exaggerated, by a sudden vicissitude from a warm to a cooler state of atmospherical temperature. As the constitution however becomes assimilated to the change, it attains a degree of vigour favourable to convalescence, which then frequently proceeds with rapidity, and by the end of the year, the invalid, if the case be not a confirmed one, has generally regained tolerable health.

The four first, are usually the most healthy months of the year, and those of the present, have been particularly so in Calcutta, for, with exception of measles, and a slight influenza, both of which have been epidemic, slight fevers, chicken pox, and such like insignificant diseases, very little sickness has prevailed. The wards of the General Hospital have in consequence been scantily supplied with patients, and a great majority of the cases admitted, have been of too uninteresting a nature to merit perusal, which will afford a satisfactory reason for not having published a separate report for each month.

CASE OF FEVER AND HEPATITIS.

Jan. 3d A. M.—G—— B—— a delicate man with sallow complexion, æt. 42 years, states that for two days he has suffered from pain at the right hypochondrium, accompanied by pyrexia, the right side is tender on pressure, the patient cannot lie comfortably but on his back, and deep inspiration, or motion of the body occasions uneasiness at the side—

V. S. and calomel and colocynth pills, at 7 A. M. pulv. purg. at noon.

P M—Side still tender, bowels freely acted on—xij leeches to the side—R calomel gr 10 and pulv. antim. gr iv hor. som. sumend.

4th. Has less fever, and the symptoms of inflammation of the liver have declined considerably, bowels freely moved—xxiv leeches applied over the region of the liver, morning and evening—R calomel gr. v—antim. tart. gr. ss—every three hours.

5th—Side much easier, and febrile symptoms relieved.—xij leeches over the side—cont. med.

6th and 7th—During these days, leeches were applied over the side, and the same medicine administered.

8th—The side free from uneasiness, and feverish symptoms have subsided, slight ptyalism has come on—a little blue pill and colocynth at bed time, and a mild aperient in the morning were continued up to the 12th when he was considered cured.

MEASLES, and CHICKEN POX, were generally treated with purgatives and antimonials; in a few instances, leeches to the temples, or over the chest were found necessary. In cases of severe INFLUENZA the practice was very similar to that pursued in the two former diseases, with addition occasionally, of counter irritation on the chest, either by stimulating embrocation, or blistering.

DYSENTERY—The two following are instances of that intense form of dysentery which may properly be considered as *hæmorrhage* from the surface of the mucous lining of the colon, under which distressing circumstances, as I in a former report remarked, I consider decided benefit is occasionally derived from the injection of a solution of the super acetate of lead and opium, in such quantity as completely to wash over the whole internal surface of the colon.

CASE 1—W—— S——, æt 53, an old man, of spare habit, by profession a sailor, but for some months past out of employ and during that period residing at Punch houses in the bazar, was admitted at the General Hospital on the 16th of January, in the condition to be described. His countenance was indicative of much anxiety, although he suffered little pain; the abdomen which was rather distended, was tender on pressure being made in the course of the ascending and transverse colon; the pulse quick, soft, and moderate in size, the tongue thickly coated with mucus, like wetted pipe clay, the skin hot; evacuations of fluid, containing a great proportion of blood, were very frequently voided, and he suffered occasional nausea. He mentioned that he had been drinking very hard for a considerable time past, and had "purging on him" for many days—xxiv leeches across the upper part of the belly, and fomentations, R. calomel gr v—Plumb. Sup. Acet. gr iij—Opii gr j—every four hours.

R. plumb. sup. acet. ʒss —— opii gr ij—cold conjee water lbiss. to be pumped up the rectum every three hours.

P M—Has passed only twelve stools since the morning visit, the latter ones containing a smaller quantity of blood, tenderness of the belly relieved—Fomentation, medicine, and injection, continued through the night.

17th—Only four stools during the night with little admixture of blood—Cont. Remed. —*Diet sago 2 cups.*

P M—Four similar evacuations, in the day.

18th—Three stools during the night, and four through the day, of *brown* fluid, with scarcely a trace of blood—Cont. Remed.

19th—Not feeling so well on this day, skin warm, pulse quick, evacuations frequent, of brown fluid, attended by pain across the upper belly—Ol. Ricini. ℥j.

P M—Several dejections of brown fœcal fluid, the pulse less frequent, he feels very low and is restless—Calomel gr v—ipecac. gr ij—opii. gr j—hor. som. sumend.

20th—Better, passed six scanty yellow mucous stools in the night, and three during the day—Pills repeated—3 times in the day.

21st—Improving—the abdomen soft and free from uneasiness, three thin fœcal stools—Pil. hydrarg. gr x—ipecac. gr j—opii. gr ss ter die sumend.—*Diet, milk and sago.*

From this date the patient gradually improved up to the 27th, when after having eaten largely of improper food (sausages and beefsteaks) smuggled into the hospital by his friends, he had a relapse of his complaint, and on the evening of this day is reported to have been purged six times of bloody fluid, attended by tenesmus, and strangury.

After a dose of castor oil, the lead injection was again resorted to, and a dose of calomel, superacetate of lead, and opium administered.

28th—During the night he passed several dark bloody evacuations, his pulse was feeble, skin cool, countenance unfavorable, and he was very much exhausted—R. plumb. sup. acet. gr iij—opii gr j—every three hours—*Port wine and sago.*

P M—Stools continue bloody, and frequent.

29th—Bloody stools were frequently voided in the course of the night and forenoon, he gradually sunk and expired at 6 o'clock P. M.

Post mortem examination—On opening the abdomen, indications of peritoneal inflammation of old date were evident. The omentum thickened considerably, adhered firmly to the peritoneum of the walls of the belly, and convolutions of the intestine, which were in many parts also glued together; and a considerable collection of amber coloured fluid with particles of curdy matter, existed in the cavity of the belly.

The external appearance of the colon was irregular, and darkly mottled; on laying open this gut, its mucous coat presented a much thickened and villous appearance, of chocolate colour, with frequent distinct irregular patches of ulceration, at the bend, and whole course of the transverse colon; the mucous coat of the small intestines and stomach, was also more red than natural, but abrasion of its surface was not observed above the large intestine.

Case 2—Ed—— Mc—— G——, æt 27, was a ship-mate and bazar chum of the subject of the preceding case. He stated that after continued intoxication, he had bowel complaint—that during a week he had suffered very frequent purging, attended by tormina and tenesmus, his pulse was frequent, hard, and rather full, skin hot, tongue coated, face flushed, evacuations of bloody fluid were constantly voided, and there was considerable pain of the bladder and retention of urine. On admission into Hospital on the night of the 14th of January, he had prescribed for him—General bleeding—a Semicupium and Domestic Enema. R. Calomel gr x—ipecac. pulv. gr. iij—*Spoon diet.*

15th—After the bath, the pain of the bladder abated, he passed urine freely, and he did not suffer so much in the night from tenesmus, but he was very frequently purged of bloody fluid, the abdomen at the lower part tender on pressure, the pulse smaller, and less quick—xx leeches to the lower belly, Fomentation, flannel dress and petee—R. Calomel gr v—Plumb. Sup. Acet. gr. iij—Opii. gr j—ter in die—R. Plumb. Sup. Acet. ℥ss—Opii gr ij—cold conjee lbij. as an enema every three hours.

P M—Stools less frequent, and urine passed naturally—Remedies continued through the night—viij leeches to the belly.

16th—The number of evacuations has been very large through the night, and in great part composed of blood, the urine again retained. His pulse small and quick, and his countenance cadaverous—a catheter passed and about lbj. of high coloured urine drawn off—Medicine and lead injections continued.—*Sago 3 cups.*

P M—He felt better, his appearance somewhat improved—stools not so constant and containing less blood—urine still retained—catheter passed, and remedies continued.

17th—Had thirty stools in the night, of brown fluid tinged with blood, character of his pulse more natural, and he passed urine.

P M—Only five stools in the day, brown fluid with admixture of blood—Remedies continued every three hours.

18th—Had only four stools in the night, and three during the day, with diminished quantity of blood; passed urine naturally, pulse rather quick and small, but firm in the stroke.

19th—Fourteen brown fœtid fluid stools in the night, does not feel so well as yesterday, the belly distended, and the pulse more rapid—Ol. Ricini. ℥j.

P M—The oil occasioned several frothy fœcal evacuations unmixed with blood, he is low and restless—R. calomel gr v—ipecac. gr ij opii. gr j hor. som. sumend.

20th—Five watery stools at night, without blood, pulse soft 100—towards evening he became very low—the belly tender, and distended, evacuations of brown fluid. There

was, at this time observable protruding through the anus, a substance, in appearance similar to a piece of intestine, about three inches long—Blister over the belly—R. Pil hydrarg. gr x—opii. gr j—bis die sumend.—*Sago and wine.*

21st—He slept well through the night and had but three brown fluid stools—ptyalism had come on, the pulse was quick, but soft and small, the substance which yesterday projected from the anus came away this morning, and consisted of a perfect cylinder of tough membraneous matter, more than ten inches in length*—and in appearance exactly resembling a portion of intestine—R pil. hydrarg. gr x—ipecac. gr j—opii. gr ss—ter die sumd.—*Sago and wine.*

22d—In all respects better. Had only four stools of thin fœcal matter in the 24 hours.—Cont. med.

27th—From the last date, the patient continued to have more evacuations than natural, three and four in the twelve hours of thin fœcal matter—and was very susceptible of change of atmospheric temperature—Pil. hydrarg, gr iv—ipecac. gr j—extr. cinchon. gr v—opii. gr ss—ter die sumend.

At first this prescription agreed with him, but after a time lost effect, the relaxed state of bowels continuing, on the 1st of February the following prescription was written—Pil. hydrarg. gr iij—rhei. pulv. gr j—extr. cinchonæ. gr v—ter die—with an occasional dose of castor oil, or rhubarb and magnesia—From these remedies he derived no permanent benefit, and on the 6th February, I ordered him to take three times in a day—Cupri. sulph. gr ss—opii. gr ss. the stools at this date being thin, and frothy, and amounting to six or seven in the twenty four hours, the patient weak and thin—but having no abdominal pain or tenderness, by the 16th, he only had two stools in the 24 hours—and by the 22d only one, on this date I increased the dose of copper, and gave—Cupri sulph. gr j Opii gr ss—ter die—which he continued to take to the end of mouth, when he was discharged from hospital, perfectly cured.

CHOLERA.

The only case, approaching in character to cholera which has presented to myself at the General Hospital during the past three months, occurred in the person of an old worn out soldier, who had for some time been a patient of the institution, for an ulcer on the leg which had just healed. On the 17th of March at 5 o'clock P. M. he for the first time mentioned, that he had had a bowel complaint for three days, and had, during the whole of this day, been vomiting and purging. His evacuations were such as are observed in cholera, and he was very much exhausted—skin cold, and pulse scarcely perceptible—Calomel gr x—opii gr. ij at 5 P. M.—R. ammon. carbon. gr v—mist. camph. ℥iss—every hour.

8 o'clock—stools less frequent—Pil hydrarg. gr v—opii. gr j—every three hours—*Warm sago and wine.*

He died early on the morning of the 18th.

Case of Cholera, treated with Saline injection into the veins—The following is one of three cases of cholera which, during the month of April 1833, I subjected to the treatment of injecting saline solution into the veins. In each instance the condition of the patient was very similar at the time the practice was instituted, and the result in each was much the same, namely, temporary excitement of the action of the heart, without permanent benefit.

A—— L——, 18 years of age, was reported to have been attacked with cholera on the day previous to admission at the General Hospital, April 27, at ¼ past ten o'clock in the forenoon. He was in rather a heavy state, but retained his intellects, and when roused answered questions correctly. His countenance was shrivelled and livid, conjunctivæ reddened, integument covering the buttock and extremities, of mottled purple colour, no pulsation perceptible at the wrist or ancle, and only faintly distinguishable at the carotids, respiration short, and rather frequent, but perfectly easy; the extremities cool and covered with moisture, there was an unnatural degree of heat at the occiput and vertex, as also at the chest. He was quite free from pain; and had had no vomiting or purging for several hours—Seventy two ounces of a solution constituted of Sodæ mur. ℥j—sodæ carbon—gr x ad. aquæ lbiij—kept at a temperature of from 108 to 110—was carefully injected into the Median Bazilic vein, at the first operation. The head covered with a mustard poultice, and Liq. ammon. ℥j—aquæ ℥j—given by the mouth every hour: and a little warm arrow-root, and port wine occasionally. Shortly after the injection was commenced, the pulse returned at the wrist, and for a considerable period, pulsated dis-

* This portion of membraneous substance bore exact resemblance in form, to a piece of intestine of the size of the rectum; its inner surface was pulpy and uneven, and outer side smooth, but this surface had not the smoothness and shining appearance which the peritoneal coat usually presents, and the expelled substance on examination, looked more as if the thickened mucous membrane had been cast off *alone*, than as consisting of the three tunics which compose the gut; that the substance was the original structure of the intestine, and not an adventitious formation, no doubt was entertained.

tinctly 116 in a minute; no change for the better however took place in his appearance. The pulse increased in size for about quarter of an hour, at which time it had become moderately full, and beat 120 strokes in a minute. After about half an hour had elapsed, the pulse began gradually to decline, and by half past eleven o'clock was imperceptible at the wrist. He had vomited once, and passed three cholera stools, since his admission into the hospital.

At 12 o'clock the saline injection was repeated, to the amount of ℥lxxii. into the veins.

The patient appeared very little affected by the introduction of the foreign fluid into the veins, until near the end of the operation, when the breathing became oppressed, and hurried for a time, but this soon subsided and the respiration resumed its former tranquil state. The pulse was again restored at the wrist, but did not beat quite so firmly as after the first operation, and failed more quickly; for by half past twelve o'clock it was scarcely perceptible; and shortly after, was not to be distinguished at the wrist, or in the brachial artery; the breathing now became hurired; the patient fell into a state of perfect insensibility, and, after experiencing several slight convulsive struggles, expired at one o'clock.

The post mortem examination, performed six hours after death (in two cases,) was as unsatisfactory as usual in cholera, but one extraordinary circumstance was remarked, that very little of the fluid, injected into the veins, was detectable by the eye within the heart, or blood vessels. The blood which was nearly entirely contained in the venous system, and right side of the heart, was generally fluid, and what had coagulated formed small unconnected clots.

In one of the cases, the injection was used four times, at intervals of about two hours and half, but the quantity of saline fluid injected at each operation, was smaller than in the preceding instance; at the first attempt about forty two ounces, and on the three subsequent, thirty, sixteen, and twelve ounces were thrown into the vein, at a temperature of from 110 to 106. Each operation restored the pulse at the wrist and ankle; but after the first injection the effect became gradually more faint, and transient, so that after the fourth operation, the pulse did not continue distinct at the wrist for more than half an hour, whereas the effect of the first, was to occasion a full, firm, and quick pulse, for nearly three hours. This patient's life was evidently *prolonged* by the treatment, but no other advantage followed the practice; and excepting a slight degree of dyspnœa, which was recognized as a sign for discontinuing the operation, no inconvenience appeared to be suffered by the patients in two of the cases, but in the third instance, each of three injections was followed by severe *internal* abdominal spasmodic pain, like colic, which continued acute for twenty minutes, or half an hour.

CASE OF ABSCESS OF THE BRAIN.

J. W——, a countryborn lad, of about 18 years of age was admitted at the General Hospital on the 19th January. He stated that twenty two days previously, the injury for relief of which he now applied, had been inflicted, and which consisted of a ragged wound, six inches in length, and about one and half or two inches in width, running across the top of the head, over the anterior part of the parietal bones. Through the greater part of this extent the skull was denuded of pericranium, and presented an unhealthy white appearance, with a rude indentation through the external table of the bones; the edges of the wound were dark and in a sloughing state. The patient's pulse was small, and frequent, and his skin hotter than natural, but he seemed to suffer little or no inconvenience, and had no headach—Poultice the head—purgative—*Milk diet.*

23d—Up to this date he appeared getting better, the febrile symptoms had abated, and the edges of the wound had put on a healthy granulating character, the cranium continuing exposed, and looking darker coloured than before.

24th—At three o'clock in the afternoon of this day, he was observed to be more irritable than usual, and feverish symptoms had recurred; towards sunset, he became delirious; subsequently fell into a state of coma, and died in the evening.

On examination after death, it was discovered, that for a space corresponding with the external wound, the dura mater was separated from the skull by a collection of pus; whilst the body of the left hemisphere of the brain, was destroyed by suppuration, and constituted an abscess, containing more than *five ounces* of pus. The blood vessels of the brain were rather more than usually injected with blood, but no unnatural quantity of fluid existed in the ventricles, or at the base of the brain.

ACCIDENTS.

1—A case of compound fracture of the end of the humerus, laying open the elbow joint, was treated successfully in the usual manner, and motion of the joint having been cautiously resorted to, soon after healing of the external wound, and union of the bone; a very flexible joint was the result.

2—A case of severe wound of the hand, from the bursting of a gun, by which the soft parts were much destroyed, the second

and third fingers partially blown off, and the joint between the carpal and metacarpal bone of the thumb, laid open, requiring removal of the thumb at the carpal joint, and of the two fingers at the second phalanges, terminated very satisfactorily, the patient recovering as useful a limb as possible, with the loss of the thumb and two fingers.

3—Two cases of fracture of the humerus, and radius, treated in the usual manner, united in a fair time.

4—A case of fractured femur through the upper third of the bone, treated on Mr. Amesbury's fracture bed, the usual symptoms of this accident, with three inches shortening of the limb, prevailed at the time of admission.—Union of the bone was accomplished in five weeks, and on the patient's getting up, the limb was free from deformity, and only one-fourth of an inch shorter than the natural one.

5—A case of fracture of the tibia and fibula, two inches above the right ankle joint, treated on Mr. Amesbury's principle. The patient was allowed to sit up in a chair and walk on crutches throughout the process of cure. After the lapse of one month, firm union of the bones, without deformity, was established.

CAPSULO-LENTICULAR CATARACT.

Six cases of cataract, in which the lens was considered of too soft consistence to be *depressed* with the European couching needle, were successfully treated at *one* operation, in the "Modified Oriental" manner, with the instrument I invented for the purpose.

SECONDARY CAPSULAR CATARACT.

The operation with the European couching needles, in cases of soft cataract, or where the crystalline lens has again risen, is frequently followed by total or partial absorption of the substance of the lens, leaving the thickened capsule to form a tough membraneous expansion behind the pupil, the adhesion of which is so firm, and its structure so tough, that it is with very great difficulty and trouble cut up, and detached by the point of a couching needle, and even then, requires a long period to undergo solution.

In several cases, I have performed the following operation with immediate removal of the obtruding cataract, and very satisfactory result.—The pupil being dilated, a small opening is made with a cataract knife at the lower margin of the cornea, and an Iris hook introduced into the anterior chamber. The dense capsule is then hooked about its centre, and by cautiously twisting the instrument round and round, the whole membrane becomes detached from its connexions, and wound round the top of the hook, so as completely to envelope it, and guard its point; the instrument being now withdrawn, brings with it the *whole* of the capsule, and any trifling portion of the lens which may still remain undissolved within it, leaving a clear pupil.

WALTER RALEIGH,
General Hospital.

HOWRAH SEAMAN'S HOSPITAL REPORT.

To the Editors of the India Journal of Medical Science.

Gentlemen,—I beg to hand to you the first half year's report of patients treated in the Howrah Seamen's Hospital for your own information, and if you will be so obliging, for that of your readers.

In your Journal for November last, you honored my "Proposals for the Establishment of a Seaman's Hospital at Howrah" with some comments too good humoured to be considered unfriendly, but so discouraging in their tone, and in their meaning so "palpably obscure" as tended greatly coming from so disinterested and deferential a chair, to deter me altogether from my attempt, and certainly to prejudice your readers against the institution, as one set up in unfriendly rivalship, or presumptuous encroachment upon the monopoly of usefulness enjoyed by a Calcutta Institution "a noble monument of benevolence and utility."

Admitting as you do at the outset of your remarks that "the accommodations at the General Hospital for sick Naval officers *are not* what could be wished" that the "liability" of their being crowded &c. "and the absence of such chamber comforts as they had been accustomed to, had many years ago impressed you with the wish that there were some kind of Sanitarium established for them"—admitting also that "a delay of half an hour, or so, *must accrue* before a sailor can reach the General Hospital," and that "there *are cases* where such a delay may be very serious"—admitting all thess postulates you conclude that "the necessity of founding a hospital for sailors while the General Hospital exists we do not recognize."

But your reasons, Gentlemen, which, after nearly blinding myself with the chaff, I at last found are—what, 1st because my plan for a hospital *at Howrah* does not include accommodation for all the paupers, and drunken sailors "from the *punch houses in Calcutta*," 2ndly because "Shipping at the Coolie Bazar" you might have added Diamond Harbour "are more readily within reach of the General Hospital than Howrah" and 3rdly because "some

ships have Surgeons of their own, and many of those cases that sink on their way to, or shortly after arrival at the General Hospital have *undergone protracted treatment* on board ship" that is—if I can understand the argument, that it is not the disease but the doctor that kills sailors. Ergo, there's no use in a seaman's hospital at all.

Now let me ask you gentlemen, in all candour, did it never strike you that aman is not fairly responsible for more than he undertakes. I never contemplated *at Howrah* such a hospital as you suppose; I never for a moment doubted or questioned the benevolence and utility of the General Hospital, nor the excellence of its management, though I pointed out, and you have acknowledged its inadequacy for certain purposes; I never denied that Mr. Hutchinson's plan for a central Dispensary for seamen, in Calcutta was " out and out the most eligible of the two" for the best of all reasons that I had never heard before, nor have I since of it.

My whole and sole endeavour was to establish at Howrah (where my lines have fallen) an institution for the benefit of *the Shipping*, which being solely appropriated for seamen, readily accessible at all hours of the day and night, from the river, without necessity for palkees, (which you know are not to be had after 8 P. M. in Calcutta) might offer such evident advantages over any *existing* establishment in Calcutta for similar purposes, as should induce the Captains of ships, as a matter of choice and convenience as well as economy to send their sick *from on board* promptly, and directly into hospital on shore, whether officers or seamen, thus affording to them what I conceived the best chance of recovery, and subjecting them to the fewest privations, the greatest comforts which their situation admitted of.

To the General Hospital and the Dispensaries of Calcutta, I gladly left and leave the care of all the men, whom drunkenness, poverty, or the indifference of their commanders consign to them: These were not included in my plan—nor do I see how you could reasonably expect me thus to burden an Institution, the calculation of whose expenses appeared to yourselves " to fall far below what the cost would practically be found to be" which expenses were to be borne by myself alone.

I regret to inform you (but in perfect confidence !) that my own misgivings on this head and your shrewder foresight have been partly justified by the result, but do not button your breeches pocket. I have no *present* design upon them, the truth being, that I really believe, that in due time the institution will be able to cover its own expences fully.

One remark only I have to make farther, and it is this. All the patients admitted into the Seaman's Hospital were bona fide seamen *in employ*. They were sent all in by their respective Captains from board ship, their expences, were in *every case* promptly and cheerfully paid: The few who were left behind when their ships sailed were either provided for by their Captains, or were able to pay for themselves: One man only was a burden to the institution till cured. No one was discharged until cured.

Such facts, gentlemen, and the report of cases, will perhaps satisfy you that the expediency and necessity of a Seaman's Hospital for this port is felt and acknowledged by those most interested in its establishment: likewise, that wherever the option exists, or the individual patient is a valuable or useful man the Howrah Hospital is likely to be preferred to the General Hospital.

A great deal is indeed wanting to make it sufficient for *all* the wants of the Port, and Shipping of Calcutta. Such an institution is beyond the exertions and the means of one individual, and I can hardly indulge the hope of seeing it ever established.

Gentlemen, your obdt. servt.

D. STEWART, M. D.

Howrah, 15*th May*, 1835.

FIRST HALF YEAR'S REPORT OF PATIENTS ADMITTED INTO THE HOWRAH SEAMAN'S HOSPITAL FROM 1ST NOV., 1834, TO 1ST MAY, 1835.

	Admitted.		Total.	Died.	Discharged.	Remain.	Remarks.
	Officers	Seamen					
November,	7	32	39	3	23	13	
December,	3	28	31		27	17	
January, ..		12	12		26	3	
February,..	10	8	18		9	12	
March, ...	9	13	22		29	5	
April, ...	6	8	14		15	4	
	35	101	136	3	129		

Howrah, 1st *May*, 1835.

D. STEWART, M. D.
Surgeon.

SELECTIONS.

ELECTRICITY AND MAGNETISM.

The medical reader will derive great satisfaction from the complete history of the medical application of electricity presented to him by Becquerel: omitting those matters more generally known, we shall present a few instances of its utilization, of which we, and perhaps some of our readers, were not before aware.

M. Marianini has indicated a means of applying galvanic electricity to the cure of some cases of paralysis and of paraplegia. He says that a current should be passed across the affected limb, during many days, or even weeks; not a continuous current, but very rapidly successive discharges of a battery at first weak, but gradually augmented. He states that by this method he obtained many cures.

Dr. Fabré-Palaprat also has obtained successful results from the process of Marianini. By means of the balance spring of a time-piece, skilfully put in connexion with the wires of a galvanic battery, he gives shocks more or less rapid to the person submitted to its action. From a great number of observations, he has recognized marked effects in cases where there was atony or debility in the functions of organs, without any lesion of tissue or inflammation; lymphatic engorgements, for instance. He has also used the calorific effects of the pile to produce internal moxas. He introduces into the part he wishes to disorganize, a platina needle in communication with one pole of a very strong battery, while the other pole communicates with the body. If the current be sufficiently intense, it heats to whiteness the platina wire which burns the organized parts in contact with it. At the end of a few days, an eschar, in the form of a tube, is produced, and may be easily withdrawn. It is evident that this plan should be very cautiously employed.

M. Orioli, one of the most distinguished philosophers in Italy, has published some theoretical considerations on a new method of modifying the laws of life, by changing the electrical condition of the living parts. After having remarked, that it is now proved in organic chemistry, that the influence of electrical conditions produces changes in the chemical properties of bodies; he says, that this effect should equally be produced in organic chemistry, and that if the living do not present the same play of affinities as dead substances, this difference should arise from the existence in the former of a peculiar electrical state, differing from that which generally exists in bodies destitute of life. At present (says he) most physiologists believe that life may be considered as the result of an action of piles skilfully combined and perpetually in action, so that every organ is an electrical machine, and that all these batteries have such a reciprocal and common relation, that the instant that life ceases, the electrical actions no longer have the faculty of being produced.

In accordance with this principle, such piles put in action by an unknown cause, connected with vitality, should necessarily produce a positive or negative polarity in parts where it would not have taken place, independent of voltaic action. There should result, where those poles are situate, secretions, excretions, and peculiar modifications, which cease from the instant that the electrical action is destroyed.

As we can annihilate the action of sea water on copper, by rendering that metal electro-negative, so we can change the nature of secretions in animals, by reversing the polarity of the organs which furnish them. The stomach, for example, secretes acids, it is then naturally positive. If this secretion be too abundant, we must develope more powerfully an opposite electrical condition. Similarly when the kidneys secrete too much uric acid, and produce calculi, they must be rendered negative.

M. Orioli advises, that before seeking to apply electricity to therapeutics, the nature of the secretions produced should be studied in order to develope in the secreting organ an electrical state, proper to determine contrary effects. These secretions are acid, or alkaline, or neuter; if they are acid or alkaline there is no difficulty: if they are neuter, there should be applied to the diseased part, the pole of a name contrary to that characterizing the part in its normal condition.

For this purpose he proposes to apply suitably to two parts of the body deprived of epidermis, two disks, one of zinc, and another of silver, communicating together by a wire of metal, and to maintain them in their places for days, weeks, or even months, only cleansing them occasionally. We shall not enter further into the details of this method, which must vary with the nature of the individual case, as our object is only to illustrate his principles. According to that distinguished philosopher, we may employ this method in the interior of the bladder, by introducing a sound, the extremity alone of which should be of a conducting material, and the remainder covered with an insulating varnish. This sound communicates with one pole of a voltaic apparatus, while the other is put in connexion with the loins. He states, that we can succeed in that way in

attacking calculi and decomposing them more simply, than with any other apparatus. If the observation of Mansford be true, that the wound in connexion with the negative pole tends always to cicatrization, it would be no doubt possible to apply this fact to the cure of certain inveterate wounds and ulcers, by putting them in communication with that pole.

The chemical agencies of electricity are of a nature so remarkable, and have consequently attracted so much popular attention, that there is not so much actually novel in their extraordinary phenomena, as in many infinitely less important and less beautiful; in addition, we have taken care, in the successive numbers of this Journal, to present such sketches of the researches of M. Becquerel himself on the effect of very feeble currents, in producing chemical combination and decomposition, that, to the readers of the Dublin Journal, his labours we trust should not be altogether new; we shall, therefore, limit ourselves to a few instances of the application of electrical agency to the detection of the poisonous vegetable principles, a subject of paramount interest to those engaged in medico-legal research.

MM. Pelletier and Couerbe presented to the Academy of Sciences, 13th January, 1834, a memoir containing a new analysis of the cocculus Indicus. They announced that they employed successfully the pile to obtain one of its immediate principles (picrotoxine) crystallized. Having recognized, after many trials, that this principle in combining with alkalies acted as an acid, they submitted to the action of the pile a solution of picrotoxine in water slightly alkalized by potash. After half an hour's action, picrotoxine had deposited itself on the positive pole, under the form of finely crystallized needles. The negative part of the apparatus contained only a solution of potash destitute of bitterness.

They have also resolved another question, by electrical agency. If picrotoxine acts as an acid towards very strong bases, should we conclude, that it would behave similarly towards the alkaloids of organic origin? They submitted to the action of the pile picrotoxate of brucine. This body was rapidly decomposed. The picrotoxine formed beautiful radiated crystals at the positive pole, and the brucine was equally deposited, but in granular crystals, on the negative wire. They remarked, that the red colour which brucine takes by contact with nitric acid is equally developed around the positive pole. This reaction may serve to distinguish brucine from morphia, which is reddened by nitric acid, but not by the pile.

The combination of picrotoxine with the vegetable alkalies, as strychnine, quinine, cinchonine, morphine, narcotine, &c. acted in an exactly similar manner.

This result is one of great utility. Its authors made an exceedingly important application of it to organic chemistry. In general it is believed, that the organic alkalies existed quite formed in vegetables, but united to acids, and that to insolate them it is necessary to abstract this latter by a stronger base. Some persons, however, have supported the opinion, that the vegetable alkalies do not exist ready formed. To decide this alternative, a solution of opium was submitted to the action of the pile. Almost immediately numerous flocculi deposited themselves in granular masses at the negative pole, whilst a few light flocculi were separated on the positive pole. The matter deposited at the negative wire having been dissolved in alcohol, and the liquor evaporated, gave brilliant crystals of morphia. The other substance presented all the character of meconic acid. We may hence conclude, that morphia pre-exists in opium, and that it can be obtained without using any alkaline material.

Having concluded the history of electricity and magnetism, M. Becquerel proceeds to an expose of the phenomena which have relations more or less intimate with electricity. Under this head he treats of phosphorescence, of terrestrial heat, of geological formations, of veins, &c.; of the alterations of rocks, and generally of the forces by which these alterations may be conceived to have been effected.

We must, however unwillingly, postpone the consideration of that department, until the appearance of the second volume shall give us an opportunity, of recurring to a subject, of itself so worthy of attention of all interested in the advancement of science, and rendered doubly attractive by the admirable manner in which it has been handled by the justly celebrated author.

ROBERT J. KANE.

Review of Becquerel's work on Electricity and Magnetism in Dub. Jour. Med. and Chem. Sc. Nov. 1834.

PURIFICATION OF CARBONATE OF SODA.

By M. Gay Lussac.

This salt is commonly purified by repeated crystallization, but it retains so large a quantity of interposed mother liquor that many operations are required to entirely free it from other substances, and after all but a small quantity is obtained. The following process having appeared to me extremely advantageous, I think it may be useful to make it known.

This process is analogous to that which is followed in France for purifying nitre. It

is as follows:—Take the crystals of carbonate of soda, such as are met with in shops; having washed them, make a saturated hot solution; when this is set to cool, stir constantly with a rod or spatula to disturb the crystallization and to obtain small crystals resembling sand: the cooling may be accelerated by placing the vessel containing the saline solution in cold water. It sometimes happens that when very much cooled the solution does not crystallize, and that it suddenly becomes solidified. This is the moment to stir very rapidly, to prevent the conglomeration of the crystals. This delay in the crystallization may be prevented, by throwing a few crystals into the solution, at the moment when it begins to be super-saturated.

Having obtained the crystals, put them into a funnel, in the neck of which place a little tow or cotton to retain them. At first let them drain, then wash them with small quantities of distilled water, waiting till the preceding washing has run through. Test from time to time the washings with nitrate of silver, the washing being previously saturated with pure nitric acid: the purification of the salt is complete when the liquid remains transparent. By this process, and in the first operation, the greater part of the carbonate of soda employed may be obtained in a perfectly pure state. The mother liquor and the washing may be evaporated, and treated in the same manner. The same mode of purifying may be used with advantage for many other salts. Its efficacy is founded upon the extreme facility with which water runs through and well washes sandy crystals, such as are obtained by disturbing the crystallization.—*Ann. de Chim. et de Phys.*, tom. lv. p. 210; and *Phil Mag.*, October, 1834.—*Dublin Jour. Med. and Chem. Sc. Nov.* 1834.

ON TRANSVERSE MALPOSITION OF THE HEAD, AS A CAUSE OF DIFFICULT LABOUR.

In a former communication in this Journal,* I insisted strongly on the indispensable necessity for a complete and intimate acquaintance, on the part of the accoucheur, with the mechanism of labour, and especially with the exact relations which the different parts of the child's head observe with those of the pelvis, during the progress of a natural labour: by the accuracy of which knowledge alone, and our readiness in applying it in practice, can we hope either to understand the actual condition of any case under our care, or be able to rectify deviations, or remove difficulties, by means at once easy, safe, and effectual, instead of being compelled to resort to the use of instruments, the application of which, *however skillfully managed*, must always expose both mother and child to a certain degree of danger, and too frequently gives rise to injuries of a very deplorable kind. If it were necessary by facts to confirm a proposition so undeniable, I could scarcely adduce any which would, in my opinion, more powerfully support its truth, or illustrate the advantages derivable from its adoption, than those on which I now propose to offer a few observations.

I presume I may take for granted, that every one engaged in midwifery practice, has from time to time met with cases in which, while every thing seemed favorably circumstanced, and the labour was apparently proceeding expeditiously to its termination, the head has become suddenly stationary in the *cavity of the pelvis*, and there remained for many hours, or perhaps until a neccessity has arisen for adopting instant means of delivery; and this too when there really existed no deficiency of space to prevent its free passage. The occasional cause of this species of arrest, I believe to be not at all generally understood, which I shall now endeavour to elucidate, by a description of a particular kind of displacement to which I have been in the habit in my lectures, of applying the name of *transverse malposition*; and by the detail of one or two cases in which its detection afforded an opportunity of giving instant and complete relief, and happily terminating a severe and protracted state of suffering.

I may just premise, that in the most perfectly natural labour, the head enters the pelvis with its longer axis in coincidence with one of the oblique diameters of that cavity, and with the chin pressed up close upon the chest, until the vertex has descended so low as to press upon the soft parts forming the floor of the pelvis; the occiput then begins to advance towards the arch of the pubis, and the face retreats towards the hollow of the sacrum; next the chin recedes from the chest, and the occiput issuing from under the pubis, the head escapes by revolving as it were on a pivot under the anterior wall of the pelvis, so that in this way the head passes through the bony and unyielding chamber of the pelvis, in such a position, that it occupies the least possible dimensions, and the departure of the chin from the chest, which immediately requires greater accommodation, does not take place until the occiput having cleared the confines of the pelvis has *unlimited* space to allow of its escape. But occasionly this felicitous arrrangement is disturbed, and complete arrest of the head produced by the deviation which occurs thus; the head

* Number xiii. p. 52, et seq.

having entered the cavity of the pelvis in the position already described, the occiput, instead of moving forward towards the pubis, recedes towards the spinous process of the ischium, and the face, instead of retreating towards the sacrum, falls into the space between the opposite spinous process of the ischium and its tuberosity; and the chin having receded from the chest the head is placed with respect to the outlet in the most unfavourable manner possible, since it presents to it the greatest possible dimensions which it is capable of assuming, its longest diameter resting its extremities on the opposite tuberosities of the ischia, while at the same time the parietal bone rests on the lower part of the sacrum and coccyx, so that the head is in the condition of a ball supported on three nearly equi-distant, solid and immoveable points; under which circumstances the action of the uterus, however vigorous, seems totally incapable of either changing the relations thus established, or of effecting the delivery, while they continue as they are. On examining, the finger will pass readily between the head and the pubis, and also posteriorly except at the point of the sacrum, but there, and opposite the tuberosities of the ischia, the head is felt to be closely locked; the anterior fontanelle is found to be in the centre of the presentation, and the sagittal suture can be traced exactly across the outlet from side to side. How completely and how long this malposition will resist the most powerful action* of the uterus, and how easily it may be rectified, will appear sufficiently from the subjoined cases; from which also it will be seen, that this difficulty (occurring as it does at a time when from the advanced position of the head, and the state of the perineum and other soft parts, delivery is momentarily expected) is likely to be productive of extreme embarrassment to the attendant, the more especially as the previous birth of full grown children, or even the circumstances of the case, may of themselves afford proof, that there is no natural deficiency of space, since the head may without difficulty be raised from its situation to which however it immediately returns, and will there remain until the necessary rectification is effected, which should be done in the following manner. Apply two fingers along the junction of the parietal and frontal bones anteriorly, then *in the absence of pain* press up the forehead and push it backwards towards the sacrum, and there retain it till the access of the next pain which will in general complete the rectification, and the delivery is speedily accomplished, at least it so happened in the instances which came under my observation. It is scarcely necessary to add, that if, during the descent of the head, a tendency to this malposition be observed, we should at once endeavour to prevent its occurrence, by adopting the means already pointed out as suited for its correction when established, and this I have succeeded in effecting in a few instances.

* "Valentissimi dolores nihil proficiunt." RŒDERER.

CASE I.—On Wednesday, July 15, 1829, I was requested to see a patient with the late Mr. Gregory, and Dr. Carter; labour had commenced on the previous Monday evening, and proceeded actively on Tuesday; by six o'clock, P. M., the perineum was distended, and the head apparently on the point of being born: in this situation, however, it remained at nine o'clock, A. M. of Wednesday, when I saw her; although the uterus had continued to act most energetically the whole of the intervening time, and the soft parts were perfectly relaxed. It was the patient's second labour; she was young, healthy, and well-formed, and had about eighteen months before borne her first child, which was full sized, after an easy labour of about five or six hours, so that deficiency of space was not probable. On examination I found the head pressing on the perineum, I could pass my finger quite easily between it and the symphysis pubis, but at the sides there was no room at all: the anterior fontanelle was in the centre of the passage, the sagittal suture coinciding with the transverse diameter of the outlet, and occiput turned to the left ischium: the uterus was acting violently, but produced no other effect upon the head than that of pressing it a little downwards during each pain, on the cessation of which it immediately resumed its original situation. Under these circumstances, I proposed manual rectification of the displacement evidently existing; and having applied my fingers, as already described, along the side of the forehead, I raised and pushed it backwards, towards the right sacro-iliac symphysis, in the interval between two contractions of the uterus; I there retained it, and on the accession of the next pain, I repeated the pressure backwards, when the forehead immediately glided to its proper place, at the same time the vertex moved forwards to the arch of the pubis, and *in about two minutes* the delivery was completed by the birth of a fine healthy child.

CASE II.—On the 14th of January, 1834, while lecturing at Sir Patrick Dun's Hospital, I received an urgent message from Mr. Dunlop, requesting my assistance in a case of obstructed labour, which he had

been called to see, and in which, from the extreme violence of the uterine action, he apprehended rupture of the uterus, if the head was not speedily extricated; it was the woman's fifth labour, the four former having been short, and in every respect favourable. In the present instance, symptoms of labour had come on the evening before, the pains had continued gentle through the night, but towards morning they became more active, and at half past seven o'clock the head was pressing upon the perineum to such a degree, that its exit was momentarily expected, but there it remained, without any further advance, when I arrived at half-past eleven, although the uterus had been, during the whole of the intervening four hours, acting incessantly and so powerfully that its rupture was with great reason apprehended. On examination, I found the perineum and soft parts protruded by the head, they were unusually relaxed and yielding; the head lay across the outlet of the pelvis, with the occiput resting against the tuberosity of the *right* ischium, and the forehead against the left, having probably descended in the second position; there was abundance of space between it and the pubis, *and it could be easily raised into the cavity of the pelvis*, but the next pain instantly forced it back to its resting place, and when there, the uterine action, although so strong, had no further effect on it whatever. I immediately adopted the same mode of rectification as in the former case, by elevating the forehead, and pushing it round towards the sacrum, when it almost instantly assumed its proper relations under the influence of a pain, *and the very next contraction of the uterus expelled it*; the body immediately followed, and the delivery was completed in *less than two minutes* from the time of effecting the change of position in the head. The child was alive and vigorous. I was fortunate enough in this case to have the valuable assistance of my friend Dr. Darley, who happened to be with me when I was sent for.

With reference to these cases, it is to be observed, that the subjects of them were women who had already borne children without any difficulty, and that there was evidence at the time, from the circumstances of their cases, that there was abundance of space, as the event fully proved; and yet the obstacle created merely by this kind of malposition of the head was such as to resist, in the one instance for *fifteen hours*, and in the other for *four*, action of the uterus, so powerful that it effected the delivery almost the very instant that the displacement was corrected.

As to the cause of this malposition, I am not prepared to offer any satisfactory explanation, nor is it, as far as I can see, a matter of the least consequence. The idea of Levret, that such misplacements of the head were caused by the situation of the placenta, is so unsupported by either facts or reasoning, and is indeed so fantastic, that I think we may dismiss it at once without further consideration. Neither is the hypothesis, which would explain them by obliquity either of situation or action of the uterus, in any degree more satisfactory. Rœderer ascribes some such deviations to misdirection of the shoulders which he supposes in such cases to be placed across the smaller diameter of the brim: that this may be so occasionally is not improbable, but in the particular species under consideration, I thing it certainly is not the case, because we can so completely correct it, merely by changing and slightly too, the position of the head without moving the child's body at all. One thing, however is certain, that when the malposition has taken place, the chin of the child has receded from the chest, and the forehead has sunk as low as the occiput and that its re-elevation is essential to the rectification, and must be accomplished before delivery will take place; for while the transverse position continues, the natural efforts will not be sufficient, the forceps will not answer our purpose, and turning is out of the question, so that if the real nature of the case be not recognized, recourse will be almost certainly had to the appalling operation of cephalotomy, and a human life unnecessarily sacrificed. It seems very reasonable to suppose, that an unusual projection or curvature of the spinous process of the ischium might have the effect of producing this accident, because under such circumstances, the forehead being prevented from gliding backwards, and being still acted on by the uterine contractions, would almost of necessity, be forced downwards into the situation where we find it in such cases, and the occiput would, of course, assume the corresponding situation at the opposite side of the outlet.—*Dr. Montgomery in Dub. Jour. Med. and Chem. Sc. Nov.* 1834.

MEDICO-LEGAL DISINTERMENTS IN FRANCE AND ENGLAND.

From an Introductory Lecture delivered at the Aldersgate-Street Medical School, Nov. 1, 1834.

By Dr. Cummin.

[Having noticed the very unsatisfactory figure made by Mr. Hunter, as a medical witness, at the trial of Donellan for the

poisoning of Sir Theodosius Boughton, the lecturer proceeded—]

The trial just spoken of was remarkable for another circumstance, to which I am desirous of drawing your attention. Evidence was given in this case as to the appearances observed on a medico-legal disinterment. The body of Sir Theodosius Boughton was taken from the grave on the *eleventh day* after death, and examined with a view to detect the marks of poison. The description given of the appearances by Dr. Rattray is curious :—"The body appeared swollen generally ; the face was of a rouud figure, extremely black." This, by the way, corresponds, with the observation made by Sir Henry Halford, in a paper read not long since at the College of Physicians : Sir Henry mentioned that he was present at the examination of Sir Theodosius Boughton's body, and that the face resembled "a pickled walnut." But to return :—"The lips were swelled and retracted, shewing the gums ; the teeth were discoloured ; the tongue protruded beyond the teeth, and turned up towards the nose. The blackness diminished as it descended towards the breast. The remainder of the body was spotted in several parts." Yet this was an appearance (the blackness confined to the head and upper part of the chest) in which Mr. Hunter—in his great zeal for the poisoner's safety—said he could see nothing but the effect of putrefaction. Dr. Rattray, however, distinctly deposed to having observed the same appearance in the body on the third or fourth day after death.

I shall not trouble you with further details of the evidence given on this occasion ; suffice it to say, that they were listened to with great attention by a crowded court, and contributed strongly, in conjunction with the other circumstantial evidence of the case, to convict the prisoner. My purpose in saying so much on the subject is to endeavour to shew you that the duties of the medico-legal practitioner are often very curiously diversified ; and that, even were there no provision for legal medicine as a distinct study—as was the case in this country at the date of the trial in question, and for many years after—still events will from time to time occur, rendering it imperative on the practitioner to undertake some of the most difficult investigations. And among those difficulties, none are perhaps more likely to tax his ingenuity than medico-legal disinterments.

What extraordinary things have been achieved in France of late years, by exploring the secrets of the grave, are sufficiently celebrated. Those achievements constitute almost a new æra in legal medicine, and confer a triumph on medical science. The murderer has been discovered ; the mutilated, perishing, and nearly evanescent remains of his victim, have been made to give their evidence against him ; the poison that deprived the victim of life has been rendered up grain for grain ; the wound that dispatched him has remained to give its awful testimony years after.

It is in France chiefly that this subject has been considered in all its bearings, and carried to a state of high perfection, both by experiment and actual practice. Orfila has particularly distinguished himself by his researches in this respect ; his work on Juridical Exhumations is as ingenious as it is singular. In it he enters deeply into the examination of the physical changes which the various tissues of the body undergo, according to the length of time elapsed up to the period of investigation—whether the parts have been deposited in earth, water, or other enveloping substances ; and with especial reference to forensic medicine, he shews how examinations of this kind may be made to elucidate obscurities relative to poisoning, wounds, infanticide, the determination of sex, age, stature, and every thing that can indicate identity. He has, besides, divested the process of much of its terrors. He has demonstrated that, with certain simple precautions, there is no danger in examining a body at any period subsequent to interment. It was the general impression up to his time that there was ; but now, however forbidding, in the eyes of persons not accustomed to such things, the duty of the examiner may appear, no medical man will look with aversion on the task—at least none who has made himself but moderately acquainted with the duties that devolve upon him ; he will, on the contrary, seize the opportunity when it offers, of at once promoting science and benefitting the community by his labours.

In the drawings which are before you, you have copies of the appearances which presented themselves to Orfila and Lesueur, in their experimental investigations.

I shall give a few examples of what may be effected by researches of this kind. Not long ago proofs of poisoning were discovered in the remains of a body that had lain in the earth for *seven years*. The case occurred at Lyons. A woman had long been suspeeted of having poisoned her father ; but for want of direct proof, justice could not reach her. At length a circumstance occurred which threw a strong light upon her guilt ; and though seven years had elapsed, it was thought requisite and proper to disinter the body. The examination and the necessary experiments were conducted by M. Ozanam, assisted by M. Ide ; and complete evidence of the pre-

sence of arsenic among the shapeless tissues of the stomach was obtained.

There was a very singular case investigated in Paris during the last year. I allude to that in which the remains of a murdered female were disinterred, identified, and the mode of death ascertained, after a lapse of *eleven years*. Little more than a heap of bones was found; but from their position, condition, and several peculiarities, the reporters (among whom we find the names of Orfila, Barruel, Chevallier, and Boys de Loury) were enabled to come to the following conclusions:—1. That those were the bones of a human skeleton; 2. of a female; 3. the age from 60 to 70; 4 the stature about five English feet; 5 the hair had been bright blond, but latterly was mixed with grey; 6. the deceased had died of strangulation—the act being homicidal; and 7. the remains had lain in the earth for several years.

The prisoners, who had long been suspected of the murder, were tried and condemned to the gallies for life—having had a narrow escape of the guillotine.

It may be perhaps curious, and not uninteresting, to you, to be reminded of certain disinterments which have taken place in this country for medico-legal purposes: we have some very remarkable ones on record. As a counterpart, and a sort of contrast to the last case, let me call your attention to what occurred in the year 1758, at Knaresborough, in Yorkshire. I allude to the celebrated case of Eugene Aram, around whose history the pen of the novelist has recently thrown so much attraction; but whose plain unvarnished story is in itself, independent of any collateral fiction, almost a romance. This highly-gifted but unfortunate person, instigated by penury, and jealousy, as it is said, but, above all, by the instigation of a depraved and profligate companion, committed a murder on one Daniel Clarke; and it was not till *fourteen years after* that proof of the crime was procured: that proof was the skeleton of the victim. Suspicion had never been attached to the name of Aram, but the desperate Houseman was long supposed to have been the assassin. At length, a skeleton being found accidentally, in a field at Thistlehill, near Knaresborough, it was thought to be Clarke's, and Houseman was examined at the inquest. He was much confused and conscience-stricken on the occasion; but affecting a a degree of levity which had just the contrary effect to what he intended, he took up one of the bones, and said, "This is no more Clarke's bone than it is my bone." Upon which he was immediately questioned as to where Clarke's bones were; for he had now as good as confessed that he knew. He turned king's evidence—denounced Aram as the murderer—admitted that he had been an accomplice, and described exactly where the true skeleton would be found. In St. Robert's Cave, he said, they would find it, "just by the entrance, and with the head turned towards the right."

On the trial, *the skull* was produced in court—a ghastly witness against the accused. On the left side of it there was a fracture, that, from its nature, could not have been made but by the stroke of some blunt instrument; the piece was beaten inwards, and could not be replaced but from within. Mr. Locock, the surgeon who was the chief, if not the sole, medical witness examined as to the appearances, gave it as his opinion, "that no such breach as that pointed out in the skull could have proceeded from natural decay—that it was not a recent fracture by the instrument with which it was dug up, but seemed to be of many years' standing." This seems to have been about the amount of the evidence which, taken with the circumstantial detail given by Houseman and some other witnesses, operated in procuring the prisoner's conviction if indeed, Aram did not himself do more to that end, by the extraordinary and truly surprising defence which he made—at once singular for its eloquence and its learning. This, I may remark, was the opinion of the celebrated Dr. Paley, who happened to be present at the trial Many years afterwards, when conversing with some friends, about certain lives in the Biographia Britannica, which somebody observed were those of obscure individuals—Eugene Aram's, for instance. "Nay." said Paley, "a man that has been hanged has some pretensions to notoriety, and especially a man who has *got himself hanged* by his own cleverness, which Eugene Aram certainly did.

Aram called no witness for the defence. He relied wholly on his own ingenuity, and produced, certainly, most powerful arguments to shew that the bones discovered were those of some hermit, who had in former times dwelt in the cave; and he mentioned several caves similar to St. Robert's, in which human bones had been found. When we recollect that it is the great principle of our law, that no man can be condemned for murder unless the body of the person supposed to have been murdered be found and identified, we must at once admit the importance of the line of argument taken up by the accused.

The identity, in fact, of the skeleton was not made out: so far from its being proved to be Clarke's, it was not even shewn to be that of a man; the sex was not proved—nor the age—nor, in short, any of the numerous

points which, no doubt, would be elicited were the examination instituted at the present day. All that was ascertained was, that here was a human skeleton found as directed to be sought for by a wretch who had given information in expectation of pardon for his crimes. Why might it not be wholly a plot of Houseman's, to get rid of the unfortunate Aram? He might have buried the bones there himself, or found them buried when digging in the cave, perhaps, for the concealment of plunder.

Let it not be thought that I am of the number of those who hold Aram to have been guiltless. The man is said to have confessed his crime before his execution. But my object in dwelling on the circumstances is to shew the very insufficient circumstantial testimony on which the prisoner's life was forfeited, under the semblance of law and justice. The truth seems to be (as Paley said, and as now seems generally admitted), that Aram was chiefly indebted to his own eloquence and cleverness for the forfeiture of his life.

About the close of the seventeenth century occurred the deeply interesting trial of Mr. (afterwards Judge) Cowper, for the murder of a young Quaker lady. There can at present be little doubt but that the deceased drowned herself in a fit of disappointed love; at the trial, however, and for a long a time after, much contrariety of opinion prevailed as to the question, whether she was simply drowned, or murdered first and thrown into the river afterwards. The evidence for and against the prisoner was chiefly derived from the appearances of the body disinterred *six weeks* after burial. No water was found in the stomach or lungs—a fact deemed conclusive by one party that the lady *could not* have been drowned; but competent witnesses on the other side—among whom were Garth, Sir Hans Sloane, and Cowper the celebrated anatomist—shewed, according to a more correct pathology, that the introduction of water into the cavities on submersion is purely accidental, and that there were appearances enough in this case to indicate suicidal drowning. The lungs, stomach, abdominal viscera, I may add, were found perfectly sound at the time of the medico-legal examination.

In the year 1828 there was another remarkable case, in which the chief evidence for the prosecution was derived from a medico-legal disinterment. You will probably remember the circumstances of the trial of Corder, for the murder of Maria Martin. The body of the victim was found buried in a barn, where it had lain for *eleven months*. On the trial, Mr. Lawton, the surgeon, stated, that he first saw the body in the hole where it was discovered. It was much decomposed, and had the appearance of having been buried for nine or ten months at least. He then described the dress, and gave so many particulars relative to what he observed, that the deceased was completely identified and the manner of her death exactly made out. A handkerchief was found tied tightly round the neck, forming a groove. In the neck there was also the mark of a perpendicular stab, about an inch and a half in breadth, extending deep into the neck. There was an appearance of injury to the right eye, and the right side of the face; it seemed as if something had passed in at the left side, through the cheek, removing the two last grinders, and then out at the right orbit. This was apparently done by a pistol ball. The lungs and chest were also examined, and there was found a wound between the fifth and sixth ribs, penetrating into the substance of the heart. This was effected by a sword, which was produced.

The sword was identified in court by the cutter who had sharpened it for Corder; and the head of Maria Martin was also identified, chiefly by the loss of a tooth in the upper and lower jaw. The observations made in the lungs, too, were important; there were adhesions of the pleura, and other marks, by which it appeared that the deceased had had cough and pain of the chest not long before death,—which was perfectly Maria Martin's case.

I have selected these few examples out of a considerable number which might be adduced, to prove the importance of a special attention to researches connected with disinterment.—*Lon. Med. Gaz. Nov.* 1834.

RAIL ROAD ACCIDENTS.

I will not detain you, at present, with a definition of compound and complicated fracture; but the reflection I make upon the subject is, that in consequence of these vast improvements in machinery, and the multiplication of them, and of a new power, as it were, being brought into operation, acting with more than the force of gunpowder, the country surgeon cannot escape from those oppressive questions which assail the army and the hospital surgeon: he must prepare himself to say what is to be done in these tremendous accidents. I was lately at Liverpool, and the party was very desirous of seeing the railway; I was satisfied with seeing one effect of it, for, on going into the hospital, I found a man, just brought in, actually divided; a workman who, although he had been upon the railway from its commencement, yet could not calculate the rapidity of motion in the machine; but hap-

pening to look a little to the right, the engine came upon him to the left, which cut his thigh obliquely across, and also his pelvis, and so mangled him that he lived only three hours. These railways being about to be formed all over the country, it is an additional reason why you should take into serious consideration what is to be done in these severe accidents, where not only the parts are laid open, and the bones fractured, but where the surrounding parts are benumbed and injured by the extraordinary rapidity with which the weights are impelled.—*Sir C. Bell in Lon. Med. Gaz. Oct.* 1834.

TREATMENT OF THE PROPENSITY TO SUICIDE.

Our magistrates have lately, in several instances, adopted the practice of inflicting punishment on persons caught in the act of making away with their own lives. The design is excellent and humane, and the result, we believe, in general has proved highly satisfactory. It often happens that a wretched person, resolved on self-murder only requires to be checked on the verge of the precipice to be made sensible of the enormity of the crime he is about to commit. Others are helped to the same conviction when they have had one cooling plunge in the water in which they intended to perish; but with the chance of safety still within their reach. Others, again, are brought to their senses by being put under a temporary restraint, and perhaps being favoured with a little leisure for reflection while treading the wonder-working Mill. This was the remedy prescribed a few days ago, by a police magistrate, for a woman, who, in a fit of drunkenness and vexation, flung herself into the London Dock. A short residence at Brixton will, no doubt, do her much good.

Judging from what we know, and having heard, of persons interrupted in their purpose of suicide, it seems probable that, in the great majority of cases, there is only required some obstacle, however slight, to divert the attention of the suicidal desperado, and to break the current of his thoughts. The story is currently told of the man who was about to precipitate himself from the battlement of a bridge at midnight, but was startled into sanity by the side of a robber's pistol levelled at his head. The spell was broken: he could see at once the awful nature of loss of life by one method, though, owing to his previously-brooding thoughts, he had lost all sense of the same bereavement by another.

Imitation is a fertile source of suicide. That man is an *imitative animal,* according to the dogma of the old philosopher, is here displayed in a serious light. The annals of every people and race on the face of the earth have something—some calamity of this kind—to quote in illustration. In the olden time, the ladies of Miletus, in a fit of melancholy for the absence of their husbands and lovers, resolved to hang themselves; and vied with each other in the alacrity with which they did the deed. In the time of the Ptolemies, a stoic philosopher pleaded so eloquently one day, to an Alexandrian audience, on the advantages of suicide, that he inspired his hearers with his principles, and a multitude of them voluntarily gave up their lives. The young women of Marseilles were, at one period, much in the habit of making away with themselves; but a law being passed, that the body of every female who committed suicide should be publicly exposed after death, the folly ceased—the sense of shame prevailed over the recklessness of life. Tarquin nailed on crosses the bodies of those who flung themselves off the Capitoline Hill, in their despair at the hard work imposed upon them: the disgrace of being crucified after death, cured the propensity. But these are instances in which some cause, more or less plausible, can be assigned for the rashness of the parties: there are others in which the actuating motives are wholly mysterious; where the suicides follow each other in quick succession, as sheep jump after their leader. Sydenham tells us, that at Mansfield, in a particular year—in the month of June—there was quite a crowd of suicides; the cause being wholly unaccountable. The same thing happened at Rouen, in 1806; at Stuttgard, in the summer of 1811; and at a village called St. Pierre Monjean, in the Valais, in the year 1813. One of the most remarkable epidemics of the sort, however, was that which prevailed at Versailles, in the year 1793. The number of suicides within the year was 1300,—a number out of all proportion enormous for the population of the town. It can scarcely be argued that "the reign of terror" will account for this; for in Paris, at the same period, the number of suicides did not exceed the annual average; and many other towns of France were as much agitated as Versailles during the Revolution, without being characterized by a similar catastrophe. There is no other reasonable way of accounting for the circumstances than by attributing them to the influence of a blind imitation. Suicide, no doubt, occurs most usually in isolated instances; but we cannot

help being struck with the extraordinary fact, that sometimes examples of it are so numerous and simultaneous that it can only be compared to the irruption of a contagious epidemic malady.

Nor is the disposition to imitate less remarkable in the *mode* of suicide. Sometimes, as at Miletus, it is the rage to hang; sometimes to drown, as the women at Lyons did in abundance towards the middle of the last century; or as the "rash intruding fools" in the London Docks have done frequently of late. Sometimes it is the fashion to use the pistol, which began to be much the practice in polite Europe about the time that Goethe's Werter caught the public taste. Some years ago oxalic acid was a favourite poison, as prussic acid often is at present: and the Parisians, it may be added, at one time vie with each other in pitching headlong from high places: while at another they prefer to asphyxiate themselves with the fumes of ignited charcoal.

It is rather amusing, however grave the subject, to find some of our French contemporaries endeavouring to account for the late frequency of suicides in Paris. It was once the custom for all their philosophers, including Voltaire, Montesquieu, and their host of disciples, to give us English the palm of superiority on this point—the only point, perhaps, on which they would give us precedence. Any allusion to the gloomy month of November was enough to raise an association of ideas in which the English, the blue devils, and hanging or drowning, were most prominent. Statistical information, however, has much disturbed these theories in latter years; and the fact that the number of suicides in Paris is to that of London in the proportion of above five to two annually, has given room for much refined speculation.

"The external circumstances," says a late French writer, "which tend to suggest the idea of suicide are very numerous at the present day in France, but more particularly so in the capital. The high development of civilization and refinement which prevails here—the clash of interests—the repeated political changes—all contribute to keep the moral feelings in a perpetual state of tension. Life does not roll on among us in a peaceful and steady current; it rushes forward with the force and precipitation of a torrent. In the terrible *mêlée* it often happens that the little minority, which have obtained a footing high above the multitude for a time, fall down as suddenly as they have risen. The struggles of life are full of miscalculations, disappointments, despair, and disgust. Hence the general source of our frequent suicides. But there are other causes in operation; and not the least, among them, the strange turn that stage plays and spectacles have latterly taken. The public taste has undergone a complete revolution in this respect. Nothing is more patronized now at the theatre than the display of crime unpunished, human misery unconsoled, and a low literature, impregnated by a spurious philosophy, declaiming against society, against domestic life, against virtue itself; applauding the vengeance of the assassin; and recognizing genius only as it is seen in company with spleen, poison, and pistols. We appeal to all who read the novels of the day, and who visit the theatres, whether what we say is not the fact."

If this be a true picture (and we believe it is) of the high state of *civilization* and *refinement* of "young France," we cannot wonder at the propensity so strongly manifested by numbers of individuals, thus *refined*, to part with life in their moments of ennui. We doubt, however, whether the expedient proposed by the writer just quoted would have all the effect intended. He feels, as well as ourselves, that the tendency to imitation, so deeply implanted in our species, has much to do with the perpetration of self-murder; but *he* thinks that the only remedy to be suggested is the suppressing, on the part of the newspapers, the frequent accounts published of individual instances of the crime. Even were this possible—and few will maintain that it is, knowing how public journalists are ever rather led by, than leaders of, the public taste—it could go but a short way in suppressing the propensity. The true way to set to work is to watch for individual instances of attempts to make away with life, and in every case to punish rigorously, as would be done to the detection of a culprit found proceeding with an intent to commit any other kind of felony. We confidently anticipate that the good that will be effected by persevering in this method will soon abundantly satisfy the most sceptical.

We are not of the number of those—and there are distinguished names among them—who hold that the very act of suicide itself is a proof of the perpetrator's insanity. Did we admit this, we could not refuse the same plea in extenuation of almost any other capital offence. At the same time, let it by no means be supposed that we would deny the existence of a suicidal monomania. Our view of the matter stands simply thus:—Suicide can in many cases be traced to hallucinations or illusions of the mind, chimerical fears of imaginary griefs: here there is no room for question.

But in the great majority of cases we have reason to believe that self-murder is decided on in consequence of no merely fanciful mental affections: some reverse of fortune has happened; some darling object of ambition or love has been irrecoverably lost; some disgrace is incurred; and numerous other motives, many of them disgusting, the offspring of depraved and vulgar habits, might be enumerated*. What is suicide, when committed under any of these circumstances, but an act dictated by the passions, in contravention of the laws of the community, and no more to be excused on the ground of insanity than any other crime proceeding from the same source? Reason itself is manifestly, to a certain extent, concerned in it; a calulation—a balance of evils, is indeed instituted; but the *passions* determine. Will any one contend that the play of inpulses so dangerous should be endured, and permitted to disturb soeiety with impunity?

The reprimand of the magistrate has often acted, on such occasions, with good effect. When Buonaparte heard of some one or two instances of suicide occurring among his troops, in the year 1802, he issued forthwith a proclamation†; which doubtless, had it not proved effectual, would have speedily been followed up by measures more summary and prompt. We give the document below, not for any originality in the fine moral lesson which it inculcates —for the sentiments will be recognized as at least 2000 years old—but because it shews how this extraordinory man considered the propensity to suicide as not beyond the reach of control, and that it was *his* policy to meet it by a check direct—not by suppressing the notice of it through any fear of a dangerous example. If the same policy which has been so laudably commenced here, be only steadily acted upon, we shall hope ere long for the happiest results. If, however, the reprimand do not seem, in certain cases, likely to have dne effect, punishment—that of solitary imprisonment, with occasional labour—will scarcely fail to be efficacious. The crime, let it be remembered, is at least the *attempt to commit* a *capital* offence,—a felony against God and the king, "who has an interest in the preservation of *all* his subjects;" and if punishment be not dealt out to the wretched culprit, for his own correction, the infliction of it is surely demanded for the warning and edification of others.—*Lon. Med. Gaz. Oct.* 1834.

* Foderé mentions the story of an Englishman who advertised that he would, on a certain day, put himself to death in Covent Garden, for the benefit of his wife and family. Tickets of admission a guinea each.

† *Order of the Day. St. Cloud.* 22 *Floreal an.* x.—The grenadier Groblin has committed suicide, from a disappointment in love. He was, in other respects, a worthy man. This is the second event of the kind that has happened in this corps within a month. The First Consul directs that it shall be notified in the order of the day of the guard, that a soldier ought to know how to overcome the grief and melancholy of his passions; that there is as much true courage in bearing mental affliction, as in remaining unmoved under the fire of a battery. To abandon one's self to grief, without resisting, and to kill one's self in order to escape from it, is like abandoning the field of battle before being conquered.

(Signed) Napoleon.
Bessieres.

REMOVAL OF LIGATURES FROM ARTERIES.

It is not uncommon in wounds which have healed by adhesion, particularly those of amputations, for a ligature which had been employed to secure an artery, to get so fixed within the wound, that it cannot be removed by ordinary force, and I have known instances of the thread thus remaining in a stump for many months, and even throughout life. In such cases the ligature is prevented from making its escape, in consequence of the artery at the point where the thread was placed retaining its vitality, the ligature not having been drawn sufficiently tight. Hence that portion of the vessel which is beyond the ligature remaining organized, and adhering to the granulating surface in contact with it, the noose of the ligature is completely enclosed in a ring formed of living parts. Now, it is this ring which prevents the ligature from separating, and when the endeavours made to pull it away forcibly have failed, there has hitherto been no method of abstracting the thread but by a painful and even dangerous dissection.

A simple mode of accomplishing this, which I have successfully employed in a few cases, and have frequently recommended to others, has been to make use of pressure in such a manner as shall gradually produce ulceration or absorption of that portion of the artery which is enclosed within the noose of the ligature, and thus enable the ligature to escape. The process is extremely simple, and not attended with pain.

The two ends of the thread which compose the ligature are first to be separated from each other, and then a common goose-quill, or piece of wood, of the same form is interposed between them, and placed across the wound. They are then to be formed into a knot over the quill, which

knot is to be drawn as tight as possible without creating pain, but sufficiently firm to keep the ligature constantly on the stretch. The tightness of the ligature is to be daily increased, which is readily accomplished by simply twisting the quill. The ligature generally separates in a few days, without creating the least disturbance in the wound.

When in any wound a ligature remains longer than usual, it is an excellent rule at once to adopt this mode of separating it, for it frequently happens that a good deal of pain is given by pulling ligatures out with force, which is completely prevented by the simple process above described.—*Lancet, Nov.* 1834.

RESTORATION OF THE NOSE AND EYELID.

Dr. Phillips, a young Belgian physician, who has been closely observing the progress of various autoplastic operations, performed in different quarters, has drawn up the details of two interesting operations, performed at the above hospital by M. Dieffenbach, a translation of which we here present to our readers. The reports contain an exact description both of the blepharoplastic and rhinoplastic mode of performing the operation.

Blepharoplastic Operation.

St. Louis' Ward, No. 2.—Lucian Massy, ætat. 48, a native of Bourancourt, a turner, perceived, about seven years since, a small pimple, under the edge of the lower eyelid, and at the great angle of the eye. He used some remedies, more with a view of getting rid of the deformity than from any actual pain in the part. An application, composed of salt and vinegar, tried for the above purpose, only increased the evil; the pimple became much larger, and soon caused an ulceration of the adjoining skin. The ulcerative process spread to the lower eyelid, which shortly afterwards was destroyed. The patient was in this state when admitted, for the first time, to the *Hôpital de la Pitié.*

M. Dieffenbach, on examining the patient, considered that the aid of surgery could be of infinite service in this case, and had no doubt not only of removing the deformity, but of replacing the lost eyelid by one of equally natural appearance. To accomplish these purposes, he had recourse to the following method of operating.

The patient having been placed on a bed, the operator made an incision in the form of a V, around the diseased parts, and having detached every portion included within its lines, he made another incision of an inch in length from the internal angle of the eye and at right angles with the axis of the body. Another incision, commencing at the external extremity of the first, with which it formed a right angle, was carried down below the malar bone (*ommette*). In this way he formed a quadrilateral flap, which was drawn inwards and applied to the mucous surface of the lower eyelid. He stopped the bleeding of several small arteries, by torsion, before he adjusted the flap. The inner border of the V incision being surrounded by several cicatrices, the result of former ulceration, M. Dieffenbach thought proper to remove them with the knife, as they stood in the way of an union by the first intention. Having stopped the flow of blood from the lips of the wound, the operator made six stitches in order to reduce the exposed surface of the V incision to a linear cicatrix. With the view of giving the new eyelid all the appearance of a real one, he drew the mucous membrane (which he had purposely preserved) over the superior margin of the flap, and fixed it, by a few stitches of the interrupted suture, upon the free border of the eyelid. The flap, thus drawn inwards, and united to the inner lip of the wound arising from excision of the diseased parts, replaced the loss of substance from the inner angle of the eye. No attempt was made to unite by the first intention, the operator not wishing to subject the flap to the slightest tension. The wound was dressed with a flat compress of linen ravellings, which was secured by means of three strips of adhesive plaster.

The suture stitches were removed at the end of two days. The upper lid remained swollen during three or four days, and the patient experienced some headach in consequence of the vessels of the eye becoming considerably injected. These symptoms soon yielded to mere emollient applications.

September 15, 1834. The patient is extremely well; the wound at the outer angle of the eye is almost healed, and the flap united to the inner angle has assumed the exact appearance of the natural eyelid. The eye is still slightly injected; this has been attributed by M. Dieffenbach to the irritation produced by the new lid, which acts as a foreign body upon the eye so long deprived of any covering.

Rhinoplastic Operation.

St. John's Ward, No. 8.—Victoire Onolle, ætat. 38, born in the department of the Upper Loire, had been suffering for seventeen years from severe attacks of headach, which ultimately became almost intolerable. After six months' treatment at the *Hôpital St. Louis*, she entered the *Hôtel Dieu.*

Shortly afterwards she was seized with severe itchings in the right nostril; poultices were applied during eight days, but without any diminution of her sufferings. The surgeon then applied some of the arsenical paste, which produced violent inflammation. At the end of twelve days a number of small pimples made their appearance, and the nose swelled to an enormous size; a thick crust was soon formed upon the part, but fell off two months afterwards, exposing the nasal fossæ, the cartilaginous portion of the nose being entirely destroyed.

The patient remained in this state for thirteen years, and the cheek bones became the seat of scrofulous eroding ulcers (*dartre rouglante*). She at last entered the *Hôpital de la Pitié*, where she was employed to attend on the sick. Having furnished herself with a metallic nose, she had no longer any idea of claiming surgical aid to replace the organ of which she had been deprived. However, on seeing the brilliant success of M. Dieffenbach, in the case of Massy, she determined on putting herself under the hands of the German surgeon, to undergo an operation, which she bore with heroic courage.

On the 8th November, M. Dieffenbach sketched with a pen an outline of the flap which he intended to "borrow" from the forehead. The plan of operation represented a triangle, with base, turned upwards, an inch and a half wide, and of the same extent in height, from which there proceeded a quadrilateral portion, destined to form the nasal partition. The truncated top of this triangle was bounded on one side by the inner extremity of the left eyebrow, but on the other side the line of incision extended nearly down to the stump (*moignon*) of the nose.

Having thus made his arrangements, M. Dieffenbach took the bistoury and separated the flap from the forehead, making the incision from above downwards. On reaching the level of the eyebrows, he extended the wound to the base of the nasal fossæ; a similar incision was made on the opposite side, so that from a level with the eyebrows to the inferior extremity of the nasal fossæ, both incisions formed an exact figure of the letter Y reversed. A horizontal incision, from nine to ten lines in length, was made in the upper lip, in order to separate it from its internal adhesion, and the operator having introduced his finger into this incision, became satisfied of the perfect freedom of the upper lip. The sides of the nose, dissected carefully from each side, made room for the flap drawn from the forehead, and turned down on the nasal fossæ.

During the time necessarily consumed in stopping the blood, M. Dieffenbach proceeded to unite the wound in the forehead. The edges of this wound were approximated by a few stitches of the interrupted suture, and to the astonishment of those present at the operation, this large wound in the forehead, which, from the retraction of the skin, was at least two inches and a half wide, and two in length, was reduced to the diameter of a three-franc piece.

The operator then proceeded to fix the lower nasal partition in the incision previously made in the upper lip, and for securing it in this position two stitches of the twisted suture were found sufficient.

The bleeding edges of the flap, and those of the stump of the nose, having been brought in contact by means of thirty-seven stitches of the twisted suture, the nasal fossæ were filled with linen ravellings; a long strap of adhesive plaster, a quarter of an inch wide, was carried above and across the lower nasal partition, and secured upon the cheeks. This strap had the double effect of flexing the nasal partition upon itself, and of keeping it in a proper position. The patient was then removed to her bed, and cold applications were directed to be kept on the forehead and cheeks, and strict abstinence observed.

At seven in the evening the flap was considerably swollen, and its temperature was cold and of a livid colour. M. Dieffenbach ordered eight leeches to be applied to the base of the flap, and three to the edges.

On the 9th the flap was more swollen than on the night before; it had however acquired a certain degree of warmth. A large quantity of blood was taken from the patient's arm, and leeches were applied at three distinct periods during the day. They were placed both upon the face and upon the flap, which was also scarified with the lancet, in order to remove the local congestion.

On the 10th, the second day after the operation, the whole of the suture stitches were taken away, and the union of the wound was found to be perfect in every part of the flap. Strict abstinence to be enforced. The patient to take some Seidlitz water. Eight leeches to be applied at the angle of each jaw.

11th. The wound uniting still more steadily; the wound in the forehead suppurating; the patient's general health quite satisfactory. Glauber salts, one ounce in three glasses of water; strict abstinence. The dressings consisted merely of a few small straps of adhesive plaster; fomentations of an infusion of chamomile flowers, with a small portion of white wine, to be applied to the flap and on the cheeks.

12th. The straps of plaster were ordered to be left off, and the application of the saturnine lotion to be continued. In the evening

another dose of Glauber salts was administered. A part of the right wing of the nose was touched with epispastic ointment, in consequence of its assuming a livid tint, and of its being rather slow in healing at that point.

13th. The patient is very well. The new nose to be washed with tepid water, another dose of Glauber salts; strict diet.

14th.—The patient continues very well; her nose perfectly healed (consolidated), and has a very satisfactory appearance, but Professor Dieffenbach thinks of making some trifling alterations, which, in point of fact, however, are dictated rather by a scrupulous nicety than necessity.

Thus, under the influence of an active antiphlogistic treatment, aided by a severe abstinence of nearly twelve days, and the exhibition of purgatives, given with a view of producing a revulsive irritation upon the intestinal canal, not only was the inflammatory state of the flap rapidly counteracted, but the scrofulous ulcers of the cheeks have almost entirely disappeared.—*Lancet, Oct.* 1834.

OPERATION OF SYMPHYSEOTOMY,

Performed by Professor Petruni, Naples.

M. Verderosa, twenty four years of age, rachitic, and of a diminutive stature, wishing to marry, was conducted by her parents to M. Galbiati, in order to ascertain whether the size of the pelvis permitted her to run the chance of becoming a mother without risk. She was accordingly examined, and the measure of a line extending from the mons veneris to the superior spine of the sacrum gave five inches and a quarter; the surgeon therefore advised her not to marry, but his recommendations were neglected, and the woman soon became pregnant. After a period of nine months, she commenced, on the 31st of May, to feel the first labour pains, at six o'clock in the evening, and at two the following day the membranes were ruptured; the pains now relaxed a little, as is usual, and then returned, but the neck of the uterus did not dilate, and the head of the child was stopped at the inlet of the pelvis, which was too narrow to permit its descent. The midwife now called up M. Galbiati, who sent for me.

Our first care was to endeavour, by every possible means, to determine the several diameters of the pelvis, which were found to be as contracted as before marriage. It now remained to decide on our conduct. Should we wait a little longer, although the waters had come away for ten hours, the pains were violent, and the head was arrested at the superior orifice? But what chance was there of the case terminating successfully, with a child at full term, and a sacro-pubic diameter, of two inches and a quarter? Hence, regarding the time which had elapsed, and the excessive smallness of the pelvis, we decided upon an operation. But as to the choice of the peculiar operation which was applicable, the cæsarean had always caused the death of the mother when practised amongst us, whereas symphyseotomy presented many chances of saving both mother and child. Besides, in the case before us, symphyseotomy was capable of increasing the antero-posterior diameter by one inch and a half to two inches and a quarter, and would therefore give us a superior diameter of three inches and three quarters, which is sufficient for a natural labour. I therefore performed the operation, and in a few minutes, although the symphysis was somewhat deviated; but I took for my guide the softness of the fibro-cartilage. The completion of the section was announced by a loud sound, which clearly indicated the degree of distention in which the inlet of the pelvis was placed. The labour was now abandoned to the force of nature, as we had agreed upon; the thighs were merely supported, and it required a separation at the symphysis pubis of two inches, before the head began to descend into the superior aperture. The interval was greater towards the right side than to the left, whence the passage was there more free. The head acted as a wedge, dilating the pelvis, and forced on by the uterus. After some pains, determined by a single dose of the secale cornutum, we perceived the head of the child descend into the pelvis, presenting its occiput completely engaged in the interval of the symphysis. At the end of an hour, the labour terminated in the first position, and a child was born in a state of asphyxia, from which it was soon recovered; the child has continued to do well; the head appeared elongated, and had therefore undergone some reduction, but not more considerable than in a natural labour when it is protracted. Its circumference was thirteen inches, its greater diameter five, and the biparietal diameter, measured the next day, gave three inches and some lines. The incision made through the pelvis and soft parts gave discharge to a very small quantity of blood; the lochia appeared as usual, and a bandage with buckles was fixed round the patient's pelvis. With common dressing the wound was completely cicatrized in thirty-five days.—*Il Filaitre-Sebezio.—Lancet, Oct.* 1834.

NEW MODE, BY M. AMUSSAT, OF EMPLOYING SUTURE OF THE INTESTINES,

Described by Charles Phillips. M. D., *of Liege.*

Having repeated the experiments of Travers, and observed that when the intestine is compressed within a circular ligature, the serous membrane of the upper portion forms rapid and close adhesions with the serous membrane of the inferior portion, that the constricted part obstructing the canal, mortifies and escapes by the rectum, that we find the intestinal tube has at the end of three days recovered its proper calibre, and that on the seventeenth day the adhesions are so perfect that it is impossible to recognise the cicatrix upon the mucous membrane of the intestinal canals, M. Amussat asked himself the question if, by employing the circular constriction, according to Travers, it would not be possible to secure to the intestine a part of its calibre, so as to allow the escape of the fecal matter and prevent all accidents. Impressed also with the importance of rendering the operation less complicated by employing substances found almost everywhere, M. Amussat imagined that a tube of elder wood about half an inch long and of a diameter corresponding with the capacity of the intestine, would answer the above purpose. With this view he tried to constrict the intestine in the groove made in the centre of the elder tube, but the attempt was not successful. The groove did not sufficiently facilitate the approximation of the serous membranes, and the adhesions failed to acquire a proper degree of solidity, and when the part gangrened by the ligature was detached, the two ends of the intestine, escaping into the abdomen, gave rise to an effusion which promptly proved mortal.

To remedy this accident, M. Amussat applied upon each end of the tube two small viroles (ferules), their bases turned to each other, and fixed to this tube by a small strip of adhesive plaster. By this means he obtained a deep groove instead of a slight depression. Two ligatures, six inches in length, each passed through a straight needle, and placed opposite each other on the edge at the truncated top of one of the cones, complete the instrument by which the strangulation of the intestine is effected. The operator then taking one or other of the separated ends of the intestine, introduces into it the tube of elder wood, furnished with two needles which are passed from within outwards, through the membranes of the intestine. The other end being kept open by means of several forceps, he then seizes the two needles together, plunges them at once to the depth of an inch into this end of the intestine, carrying them through the entire tissue, draws them out, and makes use of the two ligatures so as completely to sheathe the armed extremity of the piece of elder wood in the end of the intestine held by an assistant. A waxed thread is then applied on a level with the groove, and is drawn tightly by the operator, so as to strangulate the intestine. This soon produces a tumefaction of the membranes, which, by being turned up and brought towards each other by the ends of thread placed at the extremities of the pieces of elder, easily contract firm adhesions. That portion of intestine upon which the strangulation was immediately effected, presents, on a level with the ligature, a border, which causes an obstacle to the union of the serous surfaces. It must, consequently, be removed with a pair of small scissors. This period of the operation requires the utmost attention on the part of the surgeon. For if the resection be performed at too great a distance from the ligature, the same obstacle is still presented. If, on the contrary, too great a portion be cut away, that is to say, too close to the ligature, a slight degree of dragging may detach the intestine, and an effusion take place.

This new method of operating, performed with proper precautions, has furnished four succcessful cases out of five, in dogs, upon which it was tried. Besides, this method is free from the objections to the others, and possesses all their advantages. In the same way as in the operation of Denans, a foreign body is allowed to remain for a certain time in the abdomen; but instead of Denan's metallic cylinders, which never change their size, the inventor of this operation makes use of a tube of elder wood, armed with waxed thread, introduced into the intestine. The natural action of the mucus, and the warmth of the intestine, acting upon the cylinder of elder wood, soon render it moveable by diminishing its volume, and detaching the adhesive plaster placed round the ends; by this process the ferules fall off, and are carried out of the intestinal tube along with the fecal matter.

It must be admitted, that a certain degree of difficulty is experienced in performing the second part of the operation, namely, in sheathing the end of the elder tube provided with threads, in the end of the intestine held open by the assistant. The membranes double upon themselves, forming a constant obstacle to the introduc-

tion (*invagination*) of the tube. This operation upon the dead subject offers flattering results, inasmuch as the intestines, under such circumstances, do not contract. To obviate this difficulty, Dr. Alexander Thomson has devised the following method, proposed by him at a late sitting of the "Anatomical School of the Hospitals of Paris," but which has as yet only been applied upon the dead subject.

M. Amussat's instrument, consisting of one piece, is, according to Dr. Thomson's suggestions, divided into two portions. The two cones are moveable one upon the other, and are united by means of an ebony tube three or four lines in length. The base of each tube is separated by a groove two lines in depth, and a line and a half wide. Besides, each base is hollowed. When united, they present a ridge of two or three lines.

The moveable cone is pierced with two holes at its border, for allowing the introduction of two ligatures. Two other waxed threads pass through the substance of the tube, upon which the other cone is fixed. The end of the groove formed by the union of the two cones is made somewhat rough, for the purpose of keeping a more firm hold upon the intestine. The moveable cone is fixed upon a handle, which extends about three quarters of an inch beyond its truncated extremity. At the middle of the handle is a small permanent stud, for the purpose of holding the ligatures which are coiled around it. The extremity of the handle serves to open a free passage into the intestine, until it has reached two-thirds of an inch beyond the base of the cone fixed upon the said handle. Close to the stud are two steel arms, furnished with hooks and springs for securing the intestine. A ligature is then placed over the groove in the base of the cone, and it is tightened, so as to produce strangulation of the intestine, the operator cutting off a portion of the extremity beyond the constricted part. The two ligatures are then loosened, by which the cone is set at liberty, a needle is put on each, and they are passed through the strangulated portion of intestine. The same method having been adopted with respect to the other end of the intestine, the two cones are then united in such a way that the ligatures applied for fixing them may be in immediate contact. They are tied, and cut off near the knots, and the intestine is returned into the abdomen.

In the thesis presented to the Faculty of Paris this year by M. Choisy, previously to taking out his diploma, he describes a method of suture which does not differ from that of his instructor M. Amussat.

The substitution of a tube of elder wood is not a new invention, it is mentioned in the writings of Fabricius de Aquapendente.* Guy de Chaulac says, "Some surgeons place a tube of elder in the intestine, to prevent the feces from rotting the suture." He was quite unconcerned with regard to the expulsion of the tube, since he adds at the conclusion of the same page,† "For nature, awake to the necessity of removing those foreign bodies, expels them from the suture, and carries them out of the intestinal canal."

However, the mode of using the elder tube adopted by M. Amussat, resembles in no respect that of the ancients, and must be considered as a very ingenious application of the material, originating with that skilful surgeon.

Paris, Oct. 1834. [*Lancet Nov.* 1834.

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* Opera Chirurgica, p. 224, lib. ii.

† La Grande Chirurgié composée en 1363, edit. 1632, p. 306.

THE INDIA
JOURNAL OF MEDICAL SCIENCE.

CALCUTTA, JUNE 1, 1835.

The juncture has at length arrived, and sooner than they could have expected or desired, which renders it imperative upon the Editors, who have hitherto conducted this journal at their own sole risk and expense, to take leave of their kind supporters and subscribers; this accordingly forms the last number to be issued under their management. A feeling of regret on such an occasion is scarcely avoidable; but, as respects us, it is greatly mitigated by the reflexion that the work is firmly and extensively established, and is likely to prosper long in the hands of the professional brother to whom, as Editor and Proprietor, we have made it over from this day forward, and who, we may without flattery say, is distinguished no less by his indefatigable zeal for the advancement of Medical Science, and his great practical experience, than for his genuine philanthrophy. The first afford an earnest that no labour will be spared in continuing to render the work a vehicle for useful and original information; and the last that it will not cease to be conducted on liberal, impartial, and kindly principles.

The grounds, upon which the work was originally instituted, are already before the public. On the difficulties, and annoyances that at first served as obstacles to our undertaking, we are not disposed to dwell, more especially as it is not probable that our intentions or wishes are any longer liable to be misunderstood, or censoriously canvassed. Suffice it that at the personal cost of considerable anxiety, and entirely at our own pecuniary risk, whatever that might amount to, the INDIA JOURNAL OF MEDICAL SCIENCE is now fully and flourishingly established, and, we hope, will continue to prosper, when those who first started it may be far removed hence. As respects our successor it is proper to observe that connexions have been secured for the work in India and Europe, and that for a considerable time back it has received regular supplies of scientific works and periodicals from England.

In reference to the retirement of the original Editors it may be briefly announced, that the state of health of one of them requires some relaxation from mental labour after the paramount claims of official duty are fulfilled, and permits no longer of his continuing his self imposed task, or that active superintendence which the public have a right to expect, while the calls upon the time of his colleague are such as to prevent his being able to take the whole management upon himself.

Thus circumstanced, we cast about us for a successor, and when we mention the name of our friend FREDERICK CORBYN, Esq. Garrison Surgeon of Fort William, we doubt not that our choice will be generally approved of. From this date then Mr. CORBYN is the Proprietor and Editor of the Journal, and to him all communications and orders should in future be addressed. It will greatly add to former obligations if our talented and esteemed contributors, no less than our subscribers at large, will extend to our successor the same efficient and generous support they did to ourselves. Should, however, any of the subscribers be dissatisfied with the arrangement we have entered into, their half year's subscription paid in advance will, on application, be returned to them. Subscribers who have not paid up their arrears, are requested to do so, to Mr. CORBYN with all convenient dispatch.

Although our connexion as Proprietors and Editors of this Journal has ceased, yet, as a man feels solicitous for the growth even of a tree he has planted, so must we ever continue to take a lively interest in the prosperity of the first medical periodical ever established in India: With best wishes for their welfare and our very grateful acknowledgments to our friends and subscribers, we now bid them heartily farewell!

SCOTUS at a long interval has again favoured us. His communications have two pervading faults. They are too short, and too far between. In a word if we could so manage it, we would have a SCOTUS, and an EDINENSIS, for each number. Monstrous! they will exclaim, and is this your gratitude? In sooth when people do get hold of a good thing, they are generally anxious to help themselves to as much of it as they can, and we are free to confess that this is our case in regard to those graphic "pictures in little," which have graced our journal from the pens of both. To the accuracy and justness of some of Scotus' sketches, we can personally testify. The subject of the present one, however, is unknown to us as a professor, save by the voice of fame. That the sketch is drawn with a faithful hand we can have no doubt, more especially as some of the characteristic traits, such as the high-mindedness, the benevolence, the personal appearance, the shrewd observation, and the profound professional knowledge, remind us of his great relative the author of the "Conspectus." By the way a series of portraits of the men of yore at the Edinburgh University, would, we should imagine, be highly acceptable. Who for example, that ever sat at the feet of that Gamaliel of our profession, Gregory, can have forgotten the

man, and the inexhaustible stream of knowledge that flowed from his lips? Methinks we see his towering figure enveloped in the ample folds of the professor's dark robes, surmounting the platform of his lecturing desk. He takes off his hat, makes a low bow that shows the bald but ample periphery of that massive intellectual head. Thunders of applause greet his entrance. He now re-covers his head, and opens his note book. All is hushed again. Perhaps the subject is the history of medicine. For some time the lecture proceeds amidst the profoundest attention, but all at once roars of laughter burst out on every side, for the medical Democritus has by some happy stroke of ridicule demolished some theorist, or impaled some foolish speculator. The vagaries of Paracelsus formed a rich theme for homorous disquisition. Some of our contemporary fellow students may not yet perhaps have forgotten Gregory's quaint, brief, but emphatic way of accounting for Paracelsus' being a misogamist. On the general materiel of Gregory's lectures, it would be superfluous now to dilate. It was in diagnosis, and in simple, common sense but absolute and rigid views of treatment that he was pre-eminent. The first, second, and third qualities of his practice might be said to come all under the head of *decision*. He was by far the most popular of the clinical men of his day and this had its inconvenience, for it was not an easy matter to get near him in the crowd. The pure latinity of his symptomatology immediately attracted attention. Even in prescription, that field supposed to be most abhorrent to all that is classic; the peculiar turn of elegance where one least expected it, shewed the master hand. When he wrote a prescription with his own hand, he never used contractions. Were this practice very general, we suspect that many a prescription would be rich in solecism. *Par exemple*, we have more than once seen "*Recipe Salts*" entered in a hospital diary. The grand consideration in a prescription, is that it be thoroughly legible and intelligible. It should however, if written in *Latin*, be composed in *pure* Latin, or not at all; since plain English is at every one's disposal. Indeed the probability is, that ere long all prescriptions on the part of English medical men will be written in English.

With reference to E——'s most lively and amusing paper on Grinding, we beg to inform him that we immediately guessed from the nature of the Iodine question, *who* put it even before we came to the name (which by the bye is misspelt, as the impression owing to particular circumstances was struck off before we saw the proof.) Such questions are ever to be deprecated as frivolous and vexatious, more especially when the questioner is in the wrong, as was the case, we submit, with the professor in regard to the stain of Iodine, for we can state from experience that it is by no means easy to wash one's hand fair from it, for some time. The *Rubifacient* question was worthy of its propounder. Who ever heard of such perversion of the rules of just, fair, and solid examination? It may be a source of laughter to our readers, but we can well imagine an accomplished but timid student put out of countenance by such frivolous queries; indeed the student has ever (supposing him of course to have a fair average of knowledge) more to dread from trivialities of this sort than from a close and searching examination into essentials. There was not a professor in the university whose lectures in our day were attended to with less pleasure or profit than those of the very individual alluded to. He was, as a lecturer what Lord Palmerston used to be in the House of Commons, a bore of the first magnitude, to listen to, or follow, in consequence of his monotony of manner and the constant hem! hem! with which he not only fractured sentences but even *words*. He never had the tact to relieve a dry subject by some happy allusion or amusing (and yet instructive) anecdote, like Gregory. This was also a want that might be objected to in old Duncan, but it was made up in him by valuable qualificatious, and who was wont to be kinder or more courteous to the students than he? We still remember his tea parties

with a zest, like unto his, who had been at Plato's temperate feast. There was the intuitiveness, the readiness, the force of genius about Gregory. There was the slowness but the indefatigable labour of a matter of fact mind, that clung to whatever emanated from the other. The former was a splendid scholar, the latter was a plodding one. Gregory was a rapid observer and was seldom or never in the wrong. Duncan was a slow reasoner but he was generally in the right. The one had a great respect for whatever was established, and a horror of departing from old medical standards. Gregory held hoary error, in no estimation whatever, could without hesitation adopt a new mode of practice, and at a glance see the necessity for it. Accordingly, Duncan stood much longer by the patient's bed side, but not more to the purpose than Gregory, who was more succinct in his queries. We have seen some patients get very impatient at the length, breadth, and particularity of Dr. Duncan's queries—and yet nothing could exceed the courtesy and the blandness of the venerable querist. His statement of the case was much prolonged by the 'says he', and 'says she' with which it was interspersed, for he preserved as much of the patient's own phraseology as possible. "Well Margaret how are you to-day?" "Indeed Sir I am but very so—so." Our clinical professor would then turn to the clerk (as the house Surgeon is called in Edinburgh) and pronounce with 'good emphasis and good discretion' —"says that she is but very so so!" Of course we do not give these as the *ipsissima verba*, but as an illustration of the literalness with which he gave the patient's replies. He always, too, as well as our memory serves us, used old epithets and names such as *mercurius dulcis*, &c.—and tisan is not a more favorite article of regimen with the French, than beef tea was with Duncan. Indeed in our student days, it used to be a subject of a little bet that the bovine '*jusculum*',—would be ordered. At the examinations *pro summis honoribus*, these two were always very urbane and considerate, and so were Monro and Hope, as E. testifies.

Mr. Evans' case is a very important one as it places in striking contrast the effect of two different sorts of Emetics in Cholera. If we mistake not, Mr. Evans was the first or one of the very first who tried the effects of, and advocated the adoption of Emetics in this disease. On the present occasion he supports the exhibition of such remedies by cogent reasoning. We must except however his reference to the sickness following bleeding, as the tendency to vomit, on such an occasion, may be otherwise acccounted for, than on the supposition of its being a "restorative process." In Cholera the case may be very different—and certainly Mr. Evans' view is so far borne out by fact, that no bile appears in the egesta, nor is, for the most part, to be found in the primæ viæ. Indeed during Cholera there appears to be a suspension of this as of every other secretion.

Mr. Raleigh's ability and discrimination as a clinical reporter, and the palpability of the reasoning, on which he founds his treatment, always stamp his contributions with peculiar value. The first case in his present summary exhibits the general effects of intemperance, and exposure to atmospherical vicissitudes in India, on the European constitution. We refer to it, however, not on that account, but as it furnishes an instance of a practice which we avail ourselves of such an opportunity to hold up to general reprobation. To be sure the parties meant it kindly, but to the unhappy victim it could be no consolation, nor to his mourning friends, to know, that he was literally killed with kindness! Here was a poor fellow labouring under dysentery, always a serious disease, but in an old sailor of spare habit, and who had been leading a careless life for some time before in a tropical climate, particularly so; and just as he is beginning to improve, and while under the influence of mercurial medicine, some of his friends, without saying a word to his

medical attendant, cram him with sausages and beefsteaks! The result was what might have been expected. They might as well have given him a glass of prussic acid, with the exception that he would have suffered less pain from the latter poison than the former, for in certain conditions of the system, strong animal food, especially in large quantity, is a certain poison. Surely the law should take cognizance of such cases! It is not in hospitals and among the poor only that we meet with this laxness of morality, or rather this violation of truth and fair dealing, towards the medical practitioner, and real unkindness towards the patient. Many that ought to know better, and in a higher condition of life, at times think nothing of disobeying the positive commands of the medical attendant with—"O never mind so long as the Doctor does not know!" Just as if the Doctor prohibited certain indulgencies for his own amusement, and not as a necessary link of a determined plan. Surely as the *responsible* party, the measures of the physician in all fairness ought not be counteracted in this atrocious manner, by officious and irresponsible parties. How often is the medical man blamed for results that confound his calculations he can scarcely tell why, but which may be traceable all the time (though he may not be aware of it) to the secret indulgence of the patient himself, aided perhaps by mistaken but most uncandid friends. The story of Dr. RADCLIFFE and his patient, the old woman, is well known, and not unapposite to the subject of our strictures. It is related that this person had been for some time taking the Doctor's medicines. At length she came to relate a long complaint that they did her no good whatever: "Why then" asked the Doctor, who shrewdly suspected the cause. "Why did not you take a glass of brandy? "And so I did, Sir." "Well why not another?" "Bless your soul! and so I did Sir!" "Why not a third—as these two did no good?" "And bless you, so I did Sir," and so no doubt she did ad libitum. The Doctor was never particularly distinguished for great urbanity towards his patients, (at least after he made his fortune,) and it is said that his reply to the old woman was more remarkable for the *fortiter* than the *suaviter*. The pith of it consisted, however, in his asking how she could expect his medicines to do her any good, when she guzzled so much brandy along with them. The latter he certainly had not prescribed.

Mr. RALEIGH's second case we hold to be a very interesting one; more especially as he appears convinced that the substance discharged from the rectum, was not adventitious, but the original structure of the intestine. That a whole coil, we may say, of the lining membrane of the bowel, should come away, and the patient recover, is a fact as remarkable as it is encouraging to the practitioner. But for Mr. RALEIGH'S declaration that it was in size like the rectum, we might have been disposed perhaps to consider it as an introsusception of the ileum into the caput cœcum.

The case of abscess of the brain is a well marked one of the mischief, that is apt to follow abrasion of the cranial bones, under certain circumstances and in irritable habits. Indeed a denudation of any part of these bones of their pericranium, or investing membrane, is ever to be considered as a serious accident, since it is too apt, occasionally, to be followed by a falling in of the dura mater, from the formation of pus between it and the internal table, following the course of the external wound. We wish Mr. R. had mentioned the instrument or otherwise, with which the wound had been inflicted. The surgical part of the report, is as satisfactory as it is succint, especially as respects what may be called a *bad* accident, viz. compound fracture of the end of the humerus laying open the elbow joint.

We forget at the moment of writing, in what work reference is made to persons so peculiarly constituted, that they never comprehend the point of a joke at the time of its narration, sit unmoved amidst the laughter of the rest of the company; but all at once half an hour afterwards, to the amaze-

ment of their friends, get into a hearty fit of cachinnation—with a "very good indeed, *now* I take!" We assure our friend Doctor STEWART, that we readily and cordially participate in his good humour, although it savours considerably of the after-clap order alluded to. If he had allowed six months more to pass before making his reply; his pause would be longest on record, always saving and excepting that which occurred in the conversation between Dean Swift and his servant, at the bridge of Athlone. The Dean asked the man if he liked eggs. "Yes Sir," was the brief reply. There the conversation ended for that time, giving the Dean a full opportunity to discuss in his own mind the *why* and the *wherefore* of his servant's partiality to eggs. The conversation was resumed however a year after, by the Dean's abruptly asking "his help," as our transatlantic friends euphoneously would call him." How? "*Poached* Sir!" was the lacedemonian but decisive answer. Our friend and ourselves have, as it were, met at the bridge of Athlone, and he having taken six months to see our 'exquisite reasons'—through the "palpable obscure"—of *our* remarks in November last, pounces upon us, somewhat after the manner of the Dean, but more in the Athenian than Lacedemonian style; and seemingly not caring so much whether we like eggs poached or otherwise, as that we should not *poach* upon his manor at Howrah.

There is something infectious in our friend's facetiousness; he will, therefore, we hope, excuse our indulging in this light sort of vein, which he will infinitely have misunderstood, if for a moment he deems that there is the most minute drop of the tincture of unkindness in it. We know no one, who takes up any thing that has philanthropy for its object, with greater alacrity than Dr. STEWART. He has made the Howrah Hospital quite a hobby, and well were it for the world, if all hobbies ran their course with such uncle Tobyish hobby horsicalness as his. He will, we doubt not, give us credit, when we declare that not a tittle of unfriendly feeling ever mingled with our remarks. The question was one upon which he will admit that we could scarcely be otherwise than perfectly disinterested. Any thing that we could advance in favour of the General Hospital, could only be the result of our experience of the benefits flowing from that Institution, to humanity and science. To us individually the establishment of a Hospital here or there cannot be a matter of any personal or private interest, save as respects our sympathies as men, and the members of a humane and liberal profession.

We will not on this occasion enter very particularly into the subject of Dr. STEWART's letter, lest the scope of our remarks might perchance be misunderstood. That the Howrah Hospital may turn out a public no less than a private blessing, is our hearty wish. At the same time, we shall be excused, we trust, for saying, that we require further proof in favour of the inference drawn by Dr. STEWART, that wherever the option exists, or the individual patient is a valuable or useful man, the Howrah Hospital (thus shewn to be established on strictly utilitarian principles) is likely to be preferred to the General Hospital.

As Dr. STEWART justly contends, a person certainly is not responsible for *more* than he undertakes. We considered that Dr. STEWART undertook much that he now disclaims any intention of having undertaken at all. At the expiration of six months our friend informs us, and the world, that his idea of a Naval Hospital at Howrah was confined to certain limits and classes. This explanation would have been kinder, had it been earlier. The limit, we presume, is the mesial line of the Hoogly, and the classes are those who can pay; as poor intoxicated sailors, or those out of employ, have under present circumstances no chance of admission into the Howrah Hospital, but must shift for themselves as they best can. Had Dr. STEWART from the beginning declared, that, there was no intention whatever of receiving sailors from Calcutta, or from the moorings immediately

close to the Calcutta side of the river, this Athlone-bridge sort of explanation would probably have been unnecessary.

Will our friend excuse what perhaps he may deem officious and gratuitous, but we will honestly confess that we *did* apprehend that in the prosecution of his Howrah Hospital scheme, he had undercalculated the chances, and expenses, and might thus inconvenience himself? From one passage in his communication something, like an admission to this effect, unconsciously as it were drops from his pen. We much fear unless he speedily receive further support in his truly benevolent object, that the institution may not pay its expenses. If so, he may rely upon it that *we* shall not button up the pockets of our unmentionables; nor surely, should the public allow a most zealous and benevolent member of the community to suffer loss from his exertions in a cause so noble. We beg to tender our thanks for the report of the Howrah Hospital, which would have been more satisfactory, however, had it presented an abstract of the *diseases* as well as of the mere number of patients.

It appears that we misapprehended Mr. CAMPBELL'S meaning in our last, with reference to his proposal that medical men serving in India should undergo an examination in the oriental languages. The passage that led to our mistake of Mr. CAMPBELL'S meaning was as follows:

"The authorities of India may aid us to the remedy here, by ordaining that every medical officer throughout India shall pass an examination in one of the native languages (the choice to be made by the examined) before he be permanently appointed to the charge of a native regiment, zillah or political Agency or a native court."

We are glad to find by a note from himself that Mr. CAMPBELL never meant the proposed rule to apply to any medical men now in the country; but the structure of the sentence certainly gave us, when we penned our remarks, the impression that the proposal was extended to embrace persons now in the service. We regret the mistake and hasten to correct it.

MAJENDIE who appears to have been asleep for some time has at length roused himself like a giant refreshed, and betaken himself to his favourite subject—Physiology In selecting absorption for his subject, he has a hit at John Hunter for describing the lymphatics as the sole agents in absorption, a false theory he maintains built up upon a few inexact experiments. He next appeals to direct experiment to show that it is very probable, nay almost certain, that the lymphatic vessels of the intestines do not exercise absorption on any other substance than chyle. Three oz. of diluted alcohol were given to one dog; after a quarter of an hour there was a strong odour of alcohol in the blood, but none whatever in the lymph of the thoracic duct. Another dog took a solution of prussiate of potass; in a quarter of an hour the urine contained manifest traces of the substance, which was not found in the duct. A similar result is obtained after the administration of poisons. If the thoracic duct be tied, and an infusion of nux vomica is thrown up into the rectum, the animal will quickly be destroyed.

It is still more difficult to establish absorption by the lymphatics in the pulmonary membrane, serous tissues, the skin, &c. because the presence of lymphatics in the greater part of those tissues is far from being demonstrated; yet the arachnoid, the hyaloid membrane, and that of the aqueous humour absorb in a very active manner, although no anatomist has seen in them a single lymphatic vessel.

We must seek, then, reasons M. Majendie, for another explanation of the phenomena presented during absorption. This he calls *imbibition*, or a capillary attraction exercised by the parietes of the small vessels. The solid substances, not soluble in our humours, being unable to traverse the parietes of the small vessels resist absorption. Solids on the contrary, which are capable of combining with the tissues, or merely being dissolved in the blood, are readily absorbed. If we grant this imbibing power in the parietes of the vessels, absorption is readily explain-

ed; because, as soon as the substance reaches the internal surface of the tube, it mixes with the blood, and is transfused with that fluid to the heart. Majendie was confirmed in this supposition from a distinct remembrance, that in destroying an animal with a poisoned arrow from Java, all the soft parts surrounding the wound, to the extent of several lines, were coloured yellow, and retained the bitter savour of the poison. Even in the tissues of the dead animal, this affinity of the vascular parietes is capable of producing imbibition of the substance placed in contact with them. You take a portion of the external jugular vein of a dog; depriving it of all its cellular tissues you attach it by either extremity to two glass tubes, in order to establish a current of warm water in its interior; the vein is now in a fluid slightly acidulated, and the liquid which flows through the vessel is collected in a flask. There is no possibility of communication between the current of warm water, and the external acidulated fluid. For a few minutes, the liquid flowing through the vein does not shew any change, but after five or six, the water has become sensibly acid: imbibition and absorption have therefore taken place here. You will see the same result with veins taken from the human body. The property is equally possessed by the parietes of the arterial system, as is capable of being directly proved by experiment. Thus if imbibition and absorption take place through dead vessels why should they not occur equally in living ones?

We are enabled to prove, affirms M. Majendie, that all the blood vessels, whether arterial or venous, whether dead or living, great or small, are possessed of a peculiar imbibing property which is capable of explaining perfectly all the phenomena of absorption; or there is no part of the body in which vessels may not be traced in greater or less quantity. So imbibition takes place upon every surface, and in every tissue. This is readily demonstrated by the action of poisonous medicuments. A strongly poisonous fluid kills no matter whether it be placed in the stomach, in the mouth, in the mucous or serous surfaces, or on the naked skin. Every where you find imbibition and consequent absorption, in proportion to vascularity and quickness of circulation.

Substances which are absorbed, can only enter the economy in very small quantities at a time, because there are no openings or pores in our tissues, through which they are freely received. Thus for example, substances placed in contact with the stomach, after undergoing a peculiar change, are absorbed and taken up, but the minutest inspection with the microscope, does not show the existence of any kind of openings on the surface of that organ; hence we are to understand that during imbibition substances must undergo a very minute subdivision, and that there is no chance of large globules of matter being received into the circulation, where there are no open canals through which they may pass. Imbibition does not take place with equal intensity in all tissues, and it may be laid down as a general rule; that surfaces habitually in contact with the atmospheric air, or external agents, are most proper for the introduction of solids or liquids from the exterior to the interior of the body. In this point of view, the human frame may be divided into three great surfaces, viz. the pulmonary surface, the digestive canal, and the integumentary surface of the skin. Without following M. Majendie further at present into the subject of imbibition, in relation to the lungs, and the lining membrane of the alimentary canal, let us turn to it as it respects the skin and its important bearing on medicine in the endermic treatment of disease.

It may be laid down as a general rule that the skin does not absorb, yet if this membrane remain for a *long time*, in contact with a substance, the phenomena of imbibition and absorption take place. The comparative exemption of the skin from imbibition and absorption, is a most wise provision of nature, who has ordained this circumstance for the advantage of man, surrounding his body, as it were, with an impenetrable barrier which resists the action of deleterious agents to

which he is constantly exposed. Thus the keepers of animals frequently receive the saliva of a mad beast upon the hands, face, and other parts of the body, without any accident; the chemist, during his experiments, constantly handles the most poisonous substances, and the most active ingredients, with impunity. Prussic acid, arsenic, corrosive sublimate, &c. may be touched and retouched without danger, while the application of a small portion to the tongue, or mucous membrane of the digestive tube, will produce instantaneous death. The presence of a peculiar layer, called the epidermis, is the physical condition on which this remarkable exemption principally depends.

If we allow a patient to remain only a quarter of an hour or twenty minutes in a bath, the fluid does not penetrate the epidermis; but continue in the bath for three quarters of an hour or longer, and you will find the epidermis become softened, engorged, and placed in a condition favourable to the transmission of substances through its parietes. We take advantage of this principle to administer various active remedies through the medium of baths; sulphur, corrosive sublimate, iodine, &c. suspended or dissolved in the fluid, are, after a more or less considerable space of time, introduced into the economy. The phenomenon of inoculation is one of the most interesting and important of the application through the skin of imbibition and absorption to therapeutics.

When the epidermis is removed imbibition and absorption are produced rapidly. A happy application of this principle is what has been called the endermic method of treating disease; which consists in removing the epidermis (or outer skin) with a blister &c. and placing the medicine in immediate contact with the sanguinous vessels which cover the external surface of the cutis vera. By this means various remedies are quickly and conveniently introduced into the economy, without any of those inconveniences which many substances produce when taken into the stomach.

The endermic method may be employed in a variety of ways; the most common manner is to remove the epidermis by the action of a blister, and sprinkle the exposed surface with the powder of the substance if it be insoluble; or, in the contrary case, to place some lint, moistened with a solution of the remedy we propose to introduce upon the part. If the substance applied be one of those whose effects on the economy are readily traced and distinctly marked, they often manifest themselves in a few minutes; hence the physician must be careful how he proportions the dose of such remedies, and watch their operation with the greatest attention. We have numerous examples on record, where neglect in this matter has been followed by fatal consequences. Caustic substances, when applied to old ulcerations, in order to stimulate the vital powers of the part, have often been taken up, and have produced death; and since surgeons have been in the habit of applying arsenic to denuded surfaces, innumerable accidents of a severe nature have been the result. The seton is another form by which medicinal substances may be introduced according to the endermic method, but here also caution is necessary; and M. Majendie refers to the case of an old curé, who was poisoned in this manner by the introduction of a morsel of strychnine into a seton.

It had been felt for a long time by those best acquainted with such subjects, that it was extremely desirable the London University should have an hospital attached to it, in which the professors might give *clinical illustrations* of the subjects taught in their lectures. This object has at last been accomplished. The council of the University retain in their own hands the right of making all appointments to the hospital; and that they are likely to make a wise and discreet use of their power, we augur from their nomination of Mr. Liston to the office of Surgeon to it. When the various arrangements shall be completed, we may expect a list of the appointments, and an explanation

of all the regulations connected with the hospital. The number of beds is to be 125, which is greater than is provided in several of the recognised hospitals. The institution was to have opened on the 1st November, but the London medical periodicals of the 8th. (being the latest in our possession) are silent on the subject.

Ever since its first appearance, the 'LANCET' has powerfully exposed the abuses that prevail in the different medical corporations of the British empire, and more especially those of London. Whatever feeling of resentment this may create on the spot amongst those interested in the maintenance of such abuses, and their dependents, the result in the long run must be advantageous for the public welfare; for assuredly the public have much more to do with the question, than the many headed monster may be aware of. That medical education should be conducted on proper principles, is a point that every man, at some juncture or other, may be feelingly brought to acknowledge in his own person, when he becomes an experiment shop perhaps to ignorance and incapacity.

The LANCET, selecting one Hospital in illlustration of the facilities for acquiring information open to the student, shews that all the Physicians and Surgeons of that Hospital attend at one and the same hour! This being the case, the intelligent reader may imagine what chances of improvement the student has for benefiting by the tuition and practice of *all*, a privilege for which he has paid handsomely. Mr. Keate, Sir B. Brodie, and Mr. Walker attend on Mondays and Fridays at one o'clock. Dr. Chambers, and Dr. Seymour attend on Mondays and Fridays at one o'clock. Mr. Rawlins, Mr. Babington, Mr. Walker, Dr. MacLeod and Dr. Wilson attend on Tuesdays and Saturdays at one o'clock. The arrangements, it is justly observed, are of such a character that it is rendered *impossible* for the Student to derive any advantage from the pecuniary payment which he has made. It is *impossible* for him to observe the Hospital practice of the Physicians and Surgeons. Yet at the end of the session or of the period during which he has been defrauded, he is furnished with 'certificates' from all the medical officers, testifying, that he has at all times regularly and diligently attended to their practice—their lectures—and the numerous demonstrations made in the dead-house; for these operations also take place at the favorite hour—one o'clock. What in fact can be more preposterous than that the two eyes of each student should, as it were, be "required to behold the movements of four officers through sundry wooden floors and stone walls, and the two ears be provided at one and the same time with four sets of explanatory clinical remarks ?"

The doings of the Dublin College also occasionally produce groans among the students. Thus, ERINENSIS, a correspondent of the Lancet, complains that the Zoological Gardens in Phœnix Park, do already begin to exhibit symptoms of moral decay under corporate misrule. One proof of this is rather ludicrously put—"the other day" (observes Erinensis) "an Ostrich died and these men sold it to themselves for fifteen guineas, to be mangled and put up in secret, on the shelves of the Museum of the school of the college of Surgeons. Were the institution, in which this private interment of public property took place, properly organized, would not the occasion have been most suitable for the delivery of an appropriate discourse on the structure of this curious animal for the instruction of those with whose money it was purchased ?" Respecting the school alluded to the same writer doubts (even supposing it to be what it ought) that it is suited to the college of Surgeons, of Ireland. The individuals who compose that body, he states, are for the most part young men, who have yet leisure for the acquisition of further knowledge, who emancipated from the trammels of masters and the drudgery of learning things by rote, for an examination, have arrived at a stage of information, maturity of judgment, and freedom of

thought, when they can derive the greatest possible advantage and delight from the cultivation of the higher departments of their art. The school which these men require is not a school of dogmas, but of liberal discussion; not of pedagogues but philosophers—a school, in short, in which the library, the laboratory, the museum, would be made available to them by the ablest men who could be selected for that purpose.

GENERAL ORDERS RELATING TO THE MEDICAL SERVICE.

ORDERS BY THE HONORABLE THE GOVERNOR GENERAL OF INDIA IN COUNCIL.

13*th April* 1835.—Assistant Surgeon James Barker to be Surgeon, from the 31st March 1835, vice Surgeon, James Gilbert Gerard deceased.

20*th*.—No. 101 of 1835.—The Governor General of India in Council is pleased to make the following Appointment:

Assistant Surgeon Alexander Muir McKenzie Minto, to be Civil Assistant Surgeon at Cuttack.

20*th*.—No 102 of 1835.—The following paragraph 2d, of a Military Letter, No. 47, from the Honorable the Court of Directors to the Governor of the Presidency of Fort William in Bengal, dated the 5th November, 1834, are published for general information:

Par. 2.—The undermentioned Officers, belonging to your Establishment, have been respectively granted an extension of leave for six months.

25*th*.—Assistant Surgeon A. B. Webster.

Surgeon George Govan."

Mr. John Stewart Sutherland is admitted to the Service, in conformity with his appointment by the Honorable the Court of Directors, as an Assistant Surgeon on this Establishment. Date of arrival at Fort William, 21st April 1835.

27—No, 109 of 1835.—The Governor General of India in Council is pleased to make the following Appointments:

Superintending Surgeon John Sawers to act as 3d Member of the Medical Board, during the absence at the Cape of Good Hope, of Surgeon George Skipton, or until further Orders.

Surgeon David Renton to Officiate as Superintending Surgeon, vice Superintending Surgeon Sawers.

Apothecary Charles Fox, of the Subordinate branch of the Medical Department, being from habits of in temperance totally disqualified for the duties of his situtation, he is hereby discharged from the Service, and his Warrant cancelled.

4*th May*, 1835.—Assistant Apothecary John Butler to be Apothecary, from the 27th April 1835, in succession to Apothecary Charles Fox discharged.

Hospital Apprentice Michael R. Crawford to be Assistant Apothecary, from the 27th April 1835, in succession to Apothecary Charles Fox discharged.

Assisant Surgeon Henry Taylor, who was appointed in General Orders No. 205, of the 6th November 1834, to Officiate in Medical Charge of the Civil Station of Gyah, is confirmed in that appointment.

GENERAL ORDERS BY MAJOR GENERAL J. WATSON, C. B., PROVINCIAL COMMANDER-IN-CHIEF.

13*th April* 1835.—Assistant Surgeon Thomas Russel, lately in attendance on the Right Reverend the Lord Bishop of Calcutta, is directed to proceed to Midnapore, and to do duty with the 34th Regiment Native Infantry, until further orders.

15*th*.—Surgeon William Dyer (on Furlough) is removed from the 50th to the 59th Regiment Native Infantry.

Surgeon James Barker (new promotion) is posted to the 50th Regiment Native Infantry.

The undermentioned Officer has leave of absence:

2d Brigade Horse Artillery—Surgeon H. Newmarch, from 2d April to 2d December, to visit Mussorie, on Medical Certificate.

16*th*.—Assistant Surgeon A M. McK. Minto having been appointed to the Civil Station of Cuttack, Assistant Surgeon R. C. McConnochi, at present at the General Hospital, is directed to relieve him from the Medical charge of the Detachment of His Majesty's Troops, to which he was nominated in General Orders of the 20th February last.

Assistant Surgeon McConnochie will report himself immediately to the Officiating Brigade Major of King's Troops in Fort William.

17*th*.—Assistant Surgeon J. W. Knight is appointed to the Medical charge of a Detachment of His Majesty's Troops proceeding to the Upper Provinces, vice Assistant Surgeon McConnochie reported sick.

The undermentioned Officers have leave of absence:

3d Brigade Horse Artillery—Surgeon J. Coulter, from 15th April to 15th November, to visit Simla, on Medical Certificate.

Subordinate Medical Department—Hospital Steward Charles Hyde, 5th Battalion Artillery, from 24th March to 24th June, to visit Cawnpore and Lucknow, on private affairs.

25*th*.—The Benares Division Order of the 15th instant, by Brigadier General M. White, appointing Assistant Apothecary George Simmonds to act as Apothecary, and Hospital Apprentice Henry McMullen to act as Assistant Apothecary in the Hospital of His Majesty's 3d Buffs, until the arrival of Apothecary John Williams, is confirmed.

29*th*.—The following Meerut Division Orders are confirmed:

2*d April* 1835.—Directing Assistant Steward John Bensley to act as Steward to the 5th Battalion Artillery, during the absence on leave of Steward C. Hyde.

3*d April* 1835.—Directing Assistant Apothecary Francis O'Sullivan, arrived with a Detachment of Europeans, to do duty with the 1st Brigade Horse Artillery.

8*th April* 1835.—Directing Assistant Steward William Sylvester, returning from Landour, to do duty with His Majesty's 26th Foot, and Assistant Apothecary John Robison to do duty with the 3d Troop 3d Brigade Horse Artillery at Muttra.

30*th*.—The Meerut Division Order of the 14th instant, directing Assistant Surgeon G. Anderson, of the 1st Regiment Light Cavalry to assume Medical charge of the 69th Regiment Native Infantry, during the absence, on leave, of Surgeon K. Macqueen, is confirmed as a temporary arrangement.

30*th*.—The Sirhind Division Order of the 13th instant, directing Assistant Surgeon J. B. Macdonald, of the 3d Regiment Light Cavalry, to proceed to Simla, for the purpose, of affording Medical aid to the Civil and Military Officers and their families residing there for the benefit of their health, during the present season, is confirmed.

1*st May*.—Assistant Surgeon K. M. Scott, at present attached to the Artillery at Dum-Dum, is directed to proceed to Berhampore, and to do duty with the 4th Native Infantry at that Station, until further orders.

The Station Order by Major S. Speck, under date 24th ultimo, directing Surgeon G. G. McPherson to afford Medical aid to the Troops at Berhampore, is confirmed as a temporary arrangement, and until the arrival of Assistant Surgeon Scott.

2*nd*.—Assistant Apothecary John Robison doing duty with the 3d Troop 3d Brigade Horse Artillery, is posted to that Troop.

The Provincial Commander-in-Chief is pleased to make the following removals and postings of Medical Officers:

6*th*.—Surgeon James Duncan, on Furlough, from the 4th to the 15th Regiment Native Infantry.

Surgeon Benjamin Burt, M. D., from the 38th to the 4th Regiment Native Infantry at Berhampore.

Surgeon David Renton, (Officiating Superintending Surgeon Benares Circle of Medical Superintendence) from the 6th to the 38th Regiment Native Infantry at Secrole, Benares.

Surgeon George Baillie, from the 5th to the 72d Regiment Native Infantry at Saugor.

Assistant Surgeon Archibald Colquhoun, (Officiating Civil Assistant, Surgeon, Juanpore) from the 6th to the 38th Regiment Native Infantry at Secrole, Benares.

Assistant Surgeon Richard Phillipson, from the 72d to the 16th Regiment Native Infantry at Mhow.

7*th*.—The following Orders issued by Major General the Honorable J. Ramsay, Commanding the Meerut Divison, are confirmed:

23*d April*.—Directing Assistant Surgeon W. E. Watson, of the Horse Artillery, to assume Medical charge of the 90th Regiment Native Infantry, vice McClelland removed to the Civil branch of the Service.

4*th* May, 1835.—Surgeon D. Renton, of the 6th Regiment Native Infantry, who was nominated to officiate as Superintending Surgeon in Government General Orders of the 27th ultimo, is appointed to the Benares Circle of Medical Superintendence.

The undermentioned Officers have leave of absence.

35th Regiment Native Infantry—Surgeon J. M. Todd, from 1st June to 1st December, in extension, to remain in the Lower Provinces, on Medical Certificate.

4th. Regiment Native Infantry—Assistant Surgeon J. V. Leese, from 2d May to 30th June, to visit the Presidency, on Medical Certificate.

ORDERS BY THE HONORABLE THE GOVERNOR OF BENGAL.

6*th May*.—Assistant Surgeon W. B. O'Shaughnessy, M. D., is appointed to officiate as First Assistant to the Opium Agent of Behar until further orders.

11*th*.—The Hon'ble the Governor of Bengal was pleased, in the General Department under date the 6th instant, to appoint Assistant Surgeon W. B. O'Shaughnessy, M. D., to officiate as First Assistant to the Opium Agent of Behar, until further Orders.

ORDERS BY THE HONORABLE THE GOVERNOR OF AGRA.

The Honorable the Governor of Agra has been pleased to make the following Appointments.

2*d May*, 1835.—Assistant Surgeon A. Beattie to be Surgeon to the Governor of Agra, from the 20th of March last.

W. Watson, Esquire, Garrison Surgeon at Allahabad, to be Deputy Post Master at Allahabad.

TO CORRESPONDENTS.

The following communications have been received since our last.

SCALPEL.

Davidson on the efficacy of cold water effusions.

Case of Elephantiasis, by W. A. GREEN, ESQ.

Case of Abscess in the heart of the horse, by R. B. PARRY ESQ.

☞ Mr. Parry's interesting case is very acceptable. We trust our brethren of the Veterinary branch of the healing art will follow his example and make this Journal the vehicle for communicating the result of their valuable experience.

Case of Renal and Urinary Calculi, by C. FINCH, M. D.

VINDEX, in reply to Dr. CAMPBELL.

B, on native want of confidence in European Medical practitioners.

All communications still unpublished have been forwarded to DR. CORBYN.

THE INDIA
JOURNAL OF MEDICAL SCIENCE.

VOL. II.] JULY 1, 1835. [No. XIX.

ORIGINAL COMMUNICATIONS.

MR. BRAMLEY'S INAUGURAL LECTURE.

Delivered to the Students of the Medical College, June 1, 1835.

Mr. Bramley commenced by observing that it was in compliance with custom rather than from any notion of utility, that he gave his first address, the character of what is commonly called in College phrase, an inaugural lecture.

A formal introductory address of the description to which he referred, and on an occasion such as the present, when the students of a new, and he might be allowed to say, a noble national institution were gathered together for the first time, may justly be expected to embrace some notice of the establishment, and the objects contemplated by its founders, an outline of the course of instruction which it was intended to pursue, in teaching the art or science for the cultivation of which the particular lectureship was endowed. Also a general view of the divisions and heads of which it was intended subsequently to treat in detail.

It should, further, naturally include advice and recommendations from the preceptor to his pupils, as to their conduct, and their best course for profiting by his instructions, and so, of acquiring the most thorough and speedy knowledge of that which was to be taught. Nor should the teacher in this place, and on this occasion more particularly omit some general exposition of the advantages to be derived in after life from that knowledge.

Such Dr. B. observed were the heads, which an introductory address at the opening of this College should embrace. But there was one topic, to which it would be especially incumbent on him to allude, but that it may appear somewhat premature in the present provisional condition of the establishment, to do more than briefly advert to it; he meant, the munificent arrangements in preparation by this Government for the solid and permanent advancement of science and education, more particularly as behoved his chair, he referred to the memorable instance of public patronage bestowed on medical education in this country, for which he could not but feel that their especial acknowledgements were justly due, to the late illustrious Governor General, who in having sanctioned, or he should rather say, having instituted and organized the Medical College of Calcutta, had supplied a new and efficient stimulus for native youths, towards the acquisition of European science based on a knowledge of the English language, and had afforded large and liberal means to his pupils, of acquiring a profession, which he had little hesitation in predicting would prove a better security for winning to themselves reputation and independence, than any that the present condition of society among them admitted.

This great and liberal act on which he had here but briefly touched, would, he trusted, be duly felt and more amply, or at least, more formally acknowledged hereafter when the fitting moment should arrive.

Nor was it his intention to occupy their time that day, in dwelling upon all the other topics which, as he had already observed, an Introductory Lecture should rightly comprehend.

At present he begged his pupils to understand, that the general and enlarged course of professional instructions, which it was intended to adopt, in this seminary, could not be regularly commenced on till numerous arrangements, with regard to the erection of suitable buildings and the necessary appliances for teaching shall have been completed. These, however, he was happy to inform them, were in progress, and he trusted in the course of a few months, they would find themselves fairly and comfortably established in an institution, which would do no discredit to the age in which they lived or the munificent government which had endowed it, he would then, have the pleasure of seeing around him, a much larger number of pupils than was there assembled in this infant stage of the College.

It had been thought, however, that as a preliminary step, their time might be immediately employed with advantage, in commencing a course of instructions in the rudimental branches of anatomical science—and it was with this view solely that a

limited class had been formed in the first instance. This plan had several advantages —amongst which he would allude to the opportunity it would afford him of gaining some little previous insight into a science which it was assumed to be the intention of his pupils to take up as a profession—of paving the road to future and severer study —and of gradually dispelling those scruples which it was no more than natural they should entertain, from the circumstance of their parentage, and hereditary prejudices in regard to the study of anatomy. The plan further gave to those native gentlemen who had been selected to aid Dr. Goodeve and himself, in their labours, a good opportunity of initiating themselves in the details and methods of teaching—and last, though not least, it afforded, to his colleague and himself, the means of qualifying and perfecting themselves as instructors in the various and difficult branches of Medical Science. For he was not ashamed to acknowledge that he looked to practice and experience in the art of teaching, as his chief aid towards the successful accomplishment of the arduous and important undertaking which he had to conduct.

Having thus briefly alluded to one or two points on which it was not his intention to enlarge for the present, he should now pass on to the more immediate objects of that day's discourse, namely—to give his pupils some idea of the important nature of their studies—to point out the advantages to be derived from close and zealous application—to explain briefly what would be expected from them as students, as well as what would be required from them hereafter, as practitioners in the healing art.

In Lecturing on the Science of Anatomy, in what is generally understood by its regular course, it would, perhaps, behove him to begin, as had been customary among its Professors—with the History of Anatomy—taking a progressive view of its rise and progress in successive ages of civilization, beginning with those able anatomists among the ancients who had made themselves remarkable for their discoveries, and had laboured to prosecute or diffuse the knowledge of their art. But he must not forget, however desirable such information may be in ordinary cases, that he was placed there in a very different situation from that of a Professor in Europe. He must not forget that although surrounded by a number of intelligent youths, his class was composed of Asiatics, and that the medium of instruction, was a language which was foreign to them—that their education in the elementary branches of general knowledge was as yet incomplete and imperfect, so that their minds could not yet be supposed prepared to receive with profit the information to which he alluded.

He should not then trouble them for the present, at least, with a history of anatomical science. Because his immediate duty was to keep their minds constantly alive to those subjects, which they were then most capable of retaining in ready recollection, and to confine his discourses to such divisions and departments of the Science, as it was absolutely necessary they should learn and understand, in order to qualify themselves as useful members of an honorable profession. His chief duty, in short, was simple, and could be explained in a few words. It was to fit them for the active and practical duties of medical men. In endeavouring to accomplish which, they might rely on his discretion not to attempt teaching them too much at first—he hoped he would avoid all imputation of professional vanity, if he considered the Science of Anatomy as one which more immediately than most others concerned the welfare of the human race. Even in the most early ages, before luxury had laid the foundation of many diseases now too prevalent in these days, and even in countries comparatively remote from the influence of civilization, some knowledge of Anatomy, that is, of the structure of the human frame, must have been considered always of primary importance, in as much as self-preservation predominated over every other feeling and impulse, with exceptions too rare to be taken into account.

That science, therefore, which enabled them to afford bodily relief, to their afflicted fellow creatures, in cases of imminent danger, might well be considered as one of the first of useful acquirements. The subduing warrior, proud with conquest, would soon sink back to humble dust, but for the assistance of the anatomist, when labouring under a dangerous wound or an oppressed brain—accidents which were incident to all mankind whether in polite or barbarous nations. The magnificent, gorgeous Palace, and the bed of down, would oftentimes be found to afford even more short lived joys than the homely cot, without the succour of medical art.

When it was considered that the study of the medical profession, diligently pursued on scientific principles, enabled them by the removal of disease, to alleviate the greatest afflictions to which the human frame was exposed, they could not but feel a deep sense of the importance of that station, which they were destined to hold in the scale of society; nor could they avoid reflecting how all-important it was to establish the principles of the science on the most solid foundation. It was only by an accurate knowledge of the structure and functions of the human body in a state of

health, that they could infer and judge of the nature of disease, and that they could qualify themselves to act upon just and rational principles in its treatment.

If those observations were true (and he had little fear of their meeting with denial) he could not avoid again adverting to the liberality of this Government in having bestowed upon medical education in this country, so large a portion of public patronage. For it might be well known to all his pupils that among the very heads of their own community, where so much opulence was found and where so much extravagance of expenditure prevailed, that a miserable inattention existed, as to the nature and wants of medical science, though it was a matter in which every individual forming that community was more or less interested.

This inattention, this apathy, would be the less deplorable, if ignorance indeed were merely of a negative quality : if failing to do right, it forebore to do wrong—but in this, more than perhaps in almost any other country, it was, he regretted to say, most mischievously active, and greatly augmented the "ills which flesh is heir to"

To whose fostering care, were the lives of thousands, aye of millions, entrusted in India, under the various states of disease to which all, and every one of them, may one day or other become subject? To the wretched and ignorant empirics who infest every city, town, and village in these vast and populous territories—men eager to earn a profitable subsistence, at the expense of human suffering, yet content to remain grossly and darkly ignorant of the verriest rudiments and first principles of the healing art.

It would be illiberal in him to deny that there were exceptions to this description. But to what, he would ask, do even these rare examples amount? A mere sprinkling at most, of a few intelligent individuals who, under the guidance of some natural turn for observation aided by common sense, may have acquired some superficial knowledge of disease—such a smattering perhaps as to enable them to treat simple cases, on something approaching to rational principles, and so by relieving the sufferings of their fellow-creatures, obtain the confidence of their countrymen. But, after all, what *were* these among the number requiring medical aid ?

It surely, could not be wondered at, that these empirics—quacks—should be extensively encouraged, so long as there were no competent and respectable practitioners in the art of medicine, to fill their places. But, they would see what would be expected, if in course of time, that College should be the means of disseminating over this country, a body of well qualified, and efficient medical men—Why, independently of the advantages which must accrue both to the community and the practitioner, it may be hoped, indeed it may be expected, that the Government would extend its patronage in proposing some kind of legislative enactment, to prevent uneducated and unqualified persons from practising. This plan, he said, which at least had the recommendation of simplicity, had already been adopted in other countries, with great success. In France, for instance, there was but one school, or faculty of medicine as it was called, one education, and one examination. After having undergone the latter, the individual may practice all branches of medical science, in any part of that country. But it was only those so educated, that were qualified to practise. It was the same in the United States of America, and he believed nearly so, in the Universities of Germany : he wished he could say as much for England.

Now they might rest assured that those only who had studied the profession as a science were qualified to practise the healing art. It would always be required of such, that they be the respectful and observant followers of Nature. They would never presume to precede her, except to remove some impediment from her path, or to perform what she evidently indicated; but, as he had already said, in this country, the ignorant take the lead, place obstacles in the way of Nature's progress, and presume to direct her course. But they would find, as they advanced, that so admirably was man constituted, that the very actions of disease often tend to the restoration of health : yet these beneficial actions by the ignorant, were deemed diseases—and were put a stop to—and far worse maladies established. Trifling diseases were suspended, they might call them cured, by means destructive to health, and productive of lingering infirmities.

(To be continued.)

BURNES'S ACCOUNT OF BOKHARA.

To the Editor of the India Journal of Medical Science.

Sir,—I hope you will kindly give some opinion on the following assertions, as I confess my powers of belief stagger, at my wish to accept as true, what is believed to be so, by the intelligent author of them. In Burnes's account of the kingdom of Bokhara (vol. 2nd page 169 of his travels) it is said, "It is an astonishing fact, that in the Provinces south of the Oxus, the wheat yields a crop for three successive years. When the harvest is finished, the cattle are turned in upon the stubble fields, and in the ensuing year, the same stalks grow up and ear. The second crop is good, the next more

scanty; but it is reaped a third time." Pray mark that *the same stalks grow up and ear;* for it is often the case, that in rich land, where a ripe crop of grain has been much shaken, the following spring shews an abundance of young plants from the fallen seeds of the previous autumn. At page 276 vol. 2nd of the same work, in the chapter on the horses of Toorkistan is the following. "The breed of the Toorkmun horse is of the purest kind. When the animal is over heated, or has performed any great work, nature bursts a vein for it in the neck, which I did not at first credit till I had become an eye witness of the fact." This is indeed a poser, and well might a man doubt its truth, both before and after seeing it. With reference to our knowledge of animal Anatomy and Physiology, this effect of nature seems impossible. The tranquil flow of the blood in the veins, is against the occurrence of such an event, and even admitting that the coats of a vein might burst from undue distention of its channel, how are we to account for the blood finding its way into the external air through the cellular membrane enveloping the vessel, and the loose and strong hide of a horse's neck?

Burnes doubtless saw what he describes, for a man of his intelligence and caution could not seek to be the chronicler of marvellous stories, but the concomitant circumstances must have been overlooked by him. I can only explain the matter by supposing that an overheated horse, which had a short time before been bled in the neck, was brought to Mr. Burnes, on the springing of its vein, either by accident, or by the design of some Toorkman, naturally anxious to convince the traveller of the truth of a popular tale.

But you may explain the thing more satisfactorily, and it is important that such apparent mistakes should have some qualifying notice, to make them credible if true, or the reverse if otherwise.

Your's truly,

April 1835. SCALPEL.

ON THE STIMULATING EFFECTS OF COLD WATER.

To the Editor of the India Journal of Medical Science.

Sir,—I have lately read an account of a recovery from the effects of lightning by the application of cold water, in one of the numbers of your journal, and perhaps you will not object to the publication of the following circumstances which may be relied on as perfectly free from exaggeration.

I was once called by my servants while at Asseergurh, to kill a large powerful snake that was seen on my farm yard. After a really desperate fight I killed a dhámun six feet long, and, as I then thought, smashed its brains to atoms with a heavy solid bamboo. I took it up in triumph, and carried it to the front of my bungalow: as I wished to preserve it, and it had become very dirty, I poured a gharráh of water over its head, when to my great surprise, it immediately began running down the hill, and I had to kill it over again. I believed that the reanimation had been caused by the application of the cold water. Returning from Bombay in 1823, I passed through the cantonments at Jalná, then occupied by Madras troops, I called one morning on Dr. Alexander, who was attached to the Horse Artillery, and he told me that he had in that morning's ride rode down and killed a sickly wolf, with his hunting whip. I wished to see it, and was taken to the compound hedge, where the animal to all appearance lay dead. I said "I'll make that wolf get up and look you in the face." Alexander laughed, and said that he had smashed it's scull with the heavy brass end of his whip, and trailed it lifeless after him for a mile or two. I still persisted that I could re-animate it. At last he said, "Very well try." Some cold water was procured, and on its being dashed over the scull, the animal got up, rested on it's fore legs, and stared at us both with a most horrid glare! If Dr. Alexander be alive, he will probably remember his astonishment on the occasion.

In consequence of these and similar occurrences, I began to place great confidence in the power of cold water applied to the brain; and I will now relate, in my opinion, a very extraordinary circumstance, which shows that it was not without good cause. Soon after my return one of my chupprassees solicited permission to be absent for a few days for the purpose of visiting a large melá or fair, held in the middle of a dark and gloomy forest 20 miles to the east of the fortress. Being fond of seeing sights, I determined to accompany him, and after having dispatched a tent, on the second day I rode to a village half way, and slept there during the night; next morning I reached the fair, which was held on an open spot in the centre of the forest. It was a festival in honor of one of those huge striding Hindú deities, who from the peak of the Himalaya placed one foot on a rock in the middle of the fair, and at another step stood on a mountain in Ceylon! There could be no doubt of the fact, as the impression of his foot was still visible on the rock; and it was visited once a year with great reverence, by 150,000 innocent 'Hindús.' Nothing occurred during the day, but in the night I was repeatedly awakened by a

simultaneous and universal clapping of hands in honor of the deity before mentioned, which in the stillness of the forest had a very curious and startling effect.

I got up at day break next morning, and mounting my horse traversed the fair in all directions, at one time mightily tickled by observing faqueers lying naked on the thorns of the Babúl (most *carefully crushed*), and at another admiring the simplicity of the innumerable devotees who were crawling up and down the hill, to visit the sacred spot. On returning home I perceived at a considerable distance, on the skirts of the fair, two large mobs. I cantered up to the nearest, and instead of seeing some outrageously pious Hindu Saint, observed a very stout and handsome young woman of about 20, lying apparently dead on the ground. I quickly dismounted, and found no signs of life, but warmth of body. There was no pulsation at the wrist, temporal artery, heart or ancle. On enquiry I ascertained that she had been lying two ghurrees in that state, having fallen down *suddenly* without previous notice or illness. Owing to the mob round her, the heat was perfectly suffocating, and I desired her husband, a grey headed old man, to clear a large space round her for the sake of air, and I would try to cure her. This he eventually did, with the assistance of other men, but with great reluctance; as he said she had been so long dead that he *must take her to be buried.* She was a Mussulman: I proceeded to examine the body more minutely, and all that I could discover was, that the attack was not epileptic, but might be from spasm.

I called out for cold water, but as none was procurable, I dispatched my groom who brought my servants from my tent with a couple of large gharráhs meant for my morning bathe, which had been cooling all night. The mob was again cleared, and sitting down, I dashed water on the woman's head two or three times, still there were no symptoms of returning life. I tried again and again, and at last one of the eyelids twinkled. Delighted at this, I cleared the ground again, and uncovering her chest, I poured a whole gharráh over her body.

The effect was magical, she suddenly started up with a scream; wiped the water from her face, seized her dishevelled hair, twisting it behind her head, snatched her clothes, and looked round with a stare of astonishment. A loud shout of surprise rent the air, the miraculous cure of the feringee spread like wild-fire through the fair; accompanied by her sister and husband, I walked to my tent surrounded by a dense crowd of admirers! After seating the party in my tent I rode off to the other mob, where lay the body of a boy of 10 or 12 years of age, surrounded by howling females. I knelt down and found his body also warm, but without pulse; I requested that the mob might be cleared, and offered to try my skill on him, and my request was backed by many who accompanied me from the first scene, but all in vain. I was obliged to leave the poor boy to his fate, and was returning to my tent, which I had scarcely reached, when I saw him carried past with his legs dangling in the air to be, in my belief, buried alive.

I found my patient's pulse very languid, and therefore gave her a pint of old madeira at a draught which 'nothing loth' she swallowed, just to give a *filip* to the circulation! She slept soundly till sunset, when without once thanking me she walked out of the tent.

The fair lasted two or three days after this, during which time I never left my tent without being followed by a mob, and I am persuaded that if I had felt inclined, I might have set up for a prophet without further capital, and procured a lakh of chelas in 24 hours. But you know that is not my vocation!

A year afterwards, when riding through one of the streets of Booraupoor, I overheard a conversation amongst some Mussulmans, who were disputing, who were the most learned? the Moosulmans or Feringees? One vehemently backed the feringees, and swore "Korán ki Kusum that there were none so clever, for with his own eyes he had seen one of them raise a dead woman to life." "Jhooth bát" said another. I laughed; the Philo-feringhee jumped up, and roared out "Soobhán Ulláh there's the sahib himself, ask him. Krores of people saw him do it."

Since that period I have repeatedly stopped fits of epiplepsy in people found lying in the streets in different towns by the same means.

I am, Sir, sincerely yours,
Lakhnáu, April 24, 1835. DAVIDSON.

DISLOCATION OF THE LOWER JAW.

To the Editor of the India Journal of Medical Science.

Sir,—The following is an account given of a patient brought to me, apparently about 27 years of age, who had been ill of fever, a month previous to the dislocation taking place.

On Thursday, the 4th of December last, he was attacked by vomiting and purging. During, or directly after, the act of throwing up, the third time, he found, to his dismay, that he could not shut his mouth. In this state, he was taken to the Indigo Factory (Khal Boyla) of Mr. F. Harris, who recom-

mended him to be carried to the station. Accordingly, he arrived here on Monday morning, 8th December, about 9 o'clock A. M. His mouth was then as wide open as it possibly could be, tongue brown and dry, saliva dribbling over the chin, jaw perfectly immoveable. When asked whether he had any pain, he pointed to the depression, consequent from the dislocation, anterior to the meatus auditorius.

I first made an attempt to reduce it by twisting a portion of a towel round each of my thumbs, adjusting them on the last molares of either side, and then pressing backwards and downwards, and also depressing the anterior part of the jaw, at the same time. The attempt failed completely, as the force used appeared not to have the least effect ; I then tried with a couple of quart bottle corks, cutting the circle, so that on one side, a flat surface might be presented, thereby rendering it easier to keep them fixed in position, when placed on the surfaces of the posterior molar teeth. The man was now placed on his back, and I pressed the lower jaw, steadily upwards, but with no better success.

Seeing the prospect of an easy reduction was rather unfavorable, and bearing in mind the circumstances under which the dislocation had taken place, I gave my patient two grains of tartar emetic, and directed the painful parts to be rubbed well with laudanum, from which, he said, he found relief. In about 15 minutes he complained of nausea, I then made another unsuccessful attempt, similar to the above. About five minutes afterwards he vomited, I again returned to the task, placing him on his back, and by a steady and very firm pressure of the chin towards the upper jaw, it gradually though stubbornly closed, the dislocation being perfectly reduced. A bandage, having a hole to let the chin through, was all that was requisite, besides, telling him, if possible, to hold his peace for a few days. I saw him again the next morning, when he complained of a little stiffness only.

C. W. Fuller, *Asst. Surgeon.*
Kishnághur, 31*st Jan.* 1835.

ELEPHANTIASIS OF THE ARABIANS.

Observations communicated by Mr Lisfranc.

TRANSLATED BY T. A. WISE, M. D.

Maria Provots, aged 31 years, who had been employed in laborious occupations, was admitted into the hospital of La Pitié. She had been afflicted since seven years of age with the Arabian elephantiasis of the right leg, which was amputated on the 29th of March 1823. Her health remained pretty good for five months, after which the disease appeared in the hand and forearm, and inferior half of the right arm. When the joints of the arm were moved, which could only be done in a very contracted manner, a distinct crepitation was heard in the elbow, wrist and finger joints. By the alternate application of leeches and blisters, with an infusion of hops and antiscorbutic wine, the cure was nearly completed, when the patient insisted on leaving the hospital. Three hundred and fifty leeches were applied in numbers of from twenty to thirty at a time, and forty-seven temporary blisters were used for the cure ; and as long as the arm remained inflamed, it was covered with emollient poultices, to which landanum was added when the pain was acute.

In January 1825, the articulation of the elbow, wrist, and hand of the right side, particularly above the course of the lymphatic vessels, became suddenly painful ; a knotted and enlarged cord, resembling a string of sub-cutaneous tubercles formed in the course of the pained parts ; which was indicated by a red streak. The pain increased and extended to the axilla where the lymphatic glands were enlarged ; and the erysipelatous redness covered the lymphatics and extended over the right arm, with the exception of its superior part. The irritation extended to the subcutaneous cellular tissue followed by considerable swelling, and it was so tender that the simple contact of the clothes was distressing to the patient. The elbow and wrist and joints with those of the hand were stiff and contracted ; at the same time she was tormented with an insatiable thirst ; long and severe shivering fits, anxiety, acute fever, severe headache, and delirium. There was no vomiting. Great heat succeeded the shivering, followed by general and abundant perspirations, particularly in the affected arm, with a diminution of the febrile symptoms.

The general symptoms diminished, and again increased in the form of an accession, at the intervals of four hours, or, to speak more correctly, the fever with the exacerbations, which preceded a redness more intense, and pain more acute. The accessions commenced by coldness, sometimes confined to the affected parts, and by more intense thirst. The great heat was succeeded by very abundant perspirations, sometimes general, at other times local. Often the pain, shivering, and perspiration existed at the same time, and were confined to the diseased member, the swelling and hardness of which increased gradually, while the pain and heat diminished a little

* Traite des Maladies de la Pean, par R. Rayer, T. 2, p. 438.

during the intermission. The catamenia were suppressed, followed by severe headaches. Lumbago appeared, which with the other symptoms were removed by venesection.

She was again admitted into Hospital on the 31st March 1825, with the whole arm, with the exception of its superior half, quadruple its natural size, red, very hard, uniform and cylindrical. It felt very hot, and tender and very painful, particularly at the stiff contracted elbow and wrist joints, and joints of the hand. The system was powerfully affected during the attack, and the frequent and irregular accession was indicated by coldness, which was generally confined to the member affected. The thirst, heat and abundant perspirations succeeded or accompanied these phenomena, which considerably diminished in the intervals of the accession, with the exception of the tumefaction, the hardness of the member, and the difficulty of its being moved increased with each attack.

M. Lisfranc prescribed repose and the horizontal position of the member; and when the pain was acute, emollients with the addition of opiate preparations, as laudanum, with a warm and equable temperature. Antiphlogistic regimen was enjoined with mucilaginous and acid drinks. The five first days they applied three times sixty five leeches, without much advantage. The other remedies were continued. The redness, swelling and hardness of the member continued, and at an interval of two or three days one or two temporary blisters were applied. When they produced too severe inflammation, poultices and tepid baths were used. The discharge of serum which they occasioned was very abundant, so as to oblige the arm being dressed twice a day. At the end of a month the blisters had diminished the size of the arm. Forty or fifty small scarifications (mouchetures) were made, which caused little bleeding, but an abundant flow of serum which was promoted by local warm baths. The first discharge (from the patient's account) continued eleven days, during which the scarifications were twice repeated, and the arm was much diminished in size. The blisters and scarifications were alternately used, and from time to time an emollient poultice. Two or three days after the scarifications, one, two, or three blisters were applied.

On the 1st of May the pain was slight, the swelling and hardness diminished; the scarifications were repeated every five or six days, followed by the immediate immersion of the arm into warm water, and a considerable quantity of serum continued to be discharged. On the 15th of May, the hand was nearly reduced to the natural size; the forearm, of which the volume was much diminished, was softer, and the movements of the finger and elbow joints were pretty free; while the wrist joint was still rigid, and the arm appeared of its natural size. The scarifications were now principally applied on the upper part of the forearm. The arm continued gradually to improve until the 11th June, when severe headache with redness of the right eye occurred: purgatives, mustard baths, emollient applications to the eye were used; veal tea was added to the low diet that had been allowed. On the 15th of June the symptoms increased in intensity for which she was bled; two days after the symptoms had disappeared. The scarifications were continued particularly where there was most swelling. It was particularly the day after the scarifications had been made that a diminution of the swelling and hardness appeared. The arm slowly returned to its natural form. Since the cure the woman has been discharged several weeks.

VINDEX IN REPLY TO DR. CAMPBELL.

To the Editor of the India Journal of Medical Science.

Sir,—Although an old it is not a bad saying, "that it is an ill bird, that files its own nest." Dr. Campbell it seems has elected himself censor general of the medical profession in India, and presumes to lecture us all on our hauteur, indifference, and ignorance of the language and customs of the people we are placed amongst. We are no enemies to a certain portion of self-esteem regarding it as the source of much that is good and laudable in our nature, but we do question the right that Dr. Campbell has assumed to himself of sitting in judgment upon his medical brethren and deprecating the bad taste, (to call it by no harsher term) which is so apparent in his letter in this month's number of your Medical Journal.

Dr. Campbell laments over the want of confidence amongst the natives generally in our medical skill, and calls upon the medical gentlemen at Banáras, Patná, Delhi, &c. to corroborate his statement. I, who live not quite a hundred miles from Delhi, can state, that I can have every day of my life, as much practice as I could well get through, in addition to my public duties (unpaid I mean); for certainly unless a man be in a high political situation, he need not expect to get many fees, and as for any want of confidence in our skill I think the very contrary is displayed since they frequently bring their relatives, when all hopes have been abandoned and nothing short of a miracle could work a cure. The lack of

inclination, on the part of the natives, (if any such exist, which I am disposed to dispute) to bring their relatives or apply themselves for medical advice, proceeds not from distrust, either on the integrity, honor, or ability of the European Physician, but from their own apathy, indifference, and occasional *Avarice*. I have patients brought to me almost daily, but though the complaints of many of them would require months of medical treatment I rarely see them beyond a second or third time, unless I take them into hospital and keep them almost by compulsion, having by the way, generally to support them while so doing. Now this cannot entirely be attributed to my treating them with "hauteur or displaying ignorance of the language," since if such were their opinion, it is probable that it would get abroad and deter others from coming: to whatever cause Dr. Campbell may attribute it, I (having also my bump of self-esteem not a little developed,) am disposed to assign as the reason, their apathetic indifference—they want to be cured *off hand*, and will not take the trouble of coming daily, a mile or two, for such a trivial matter as getting rid of a complaint, unless indeed that complaint were situated in the organs of procreation, and interfered with certain enjoyments desirable from the healthy and vigorous functions of these organs, and then indeed the anxiety and perseverance they display is quite wonderful.

The ingratitude of the natives too for services done them, is quite sufficient to disgust the majority of medical men. We observe it has done so long ago. If I may be pardoned for saying it, I think I have occasionally afforded them some relief in their diseases, and at all events have taken considerable pains with them: but at this moment, I can hardly recall one instance, in which the patients evinced a spark of gratitude; they generally left me, when their complaints were nearly removed, without even asking permission to go or thanking me. I had a man, a respectable ryot, brought to me about a month ago, suffering under retention of urine, and certainly at the moment I succeeded in giving him relief, from the agony he was in, he did call me Mahárájá, Gureeb Purwar, and several other very civil sort of names, but though I shewed him the greatest attention, and drew off his urine daily for him, for upwards of a fortnight, he left me one night without even saying "I'm off good bye," nay he was disposed to think, I had behaved shabbily to him in not allowing so much for his "table expenses," as he thought himself entitled to, being a man of respectability and not accustomed to common fare. I could multiply cases upon cases evincing similar instances of ingratitude, and I imagine most medical men in India have nearly the same complaint to make.

But let us take the doctor on his own ground, viz. that were we to study the colloquial language of the natives more, we should by that means acquire their confidence. Pray did Dr. Campbell, with all that perfect knowledge of the language and habits of the natives which undoubtedly he must possess, impress his native doctor with enough of confidence in his abilities to persuade him to entrust his Bubo to his medical skill? Now I have known Mussulmans and Hindús of respectability bring their wives (the former at least having to break through an almost impenetrable barrier of prejudice in so doing) to English surgeons for medical aid, although they (the surgeons) neither held high political appointments, nor professed themselves masters of Philology; let Dr. Campbell reconcile the contradiction if he can; else

"Who shall decide, when doctors disagree."

Dr. Campbell, seems to think, that were we to attend more to the gratuitous advice he has so kindly given us, we might benefit in our pockets; and holds out very flattering prospects, the utter fallacy of which no man bewails more than myself; and as I have stated *Avarice* on the part of the natives to be one cause of their (I here of course allude to the richer classes) not employing us so frequently as might be expected, I shall mention a case in point.

A medical friend of mine, not long ago, received a visit from the Bullunghur Rájá. The Rájá had an ulcer on his leg, and after my friend had prescribed for it, the Rájá's whole "train," came round him, one asking to be cured of leprosy, a second to have his powers of virility restored; one was lame and another nearly blind. My friend told them he would be most happy to do all in his power for them, but hinted that he should expect to be remunerated for his trouble. "The *word* stuck in their throats." They slunk away, and the Rájá never repeated his visit. Now here is a man, on the receipt of I do not know how many lacks of rupees annually, who will come to an English surgeon and ask to be cured in the name of God for charity's sake as the Spaniards term it; but as soon as the word payment is broached he vanishes never to return. The stinginess of the natives in this respect is so generally known, that I am surprized that Dr. Campbell even hints at the idea of their paying us. I could give heaps of cases both from my own experience and that of others where natives of respectability and wealth, after betraying the greatest anxiety for our advice, either

forgot remuneration altogher, or gave it in such a mean, stingy, dirty manner, as almost to be insulting. I don't value the few solitary exceptions, where princely fees have been received as at all invalidating the truth of what I now state. The medical man in India will have no difficulty in getting practice to his heart's content, if such be his wish and he can submit to all the annoyances and vexations which he will daily encounter from their apathy, ignorance, superstition and ingratitude; but if he expects to reap pecuniary advantage from it, he will find himself woefully mistaken. The natives in this respect are stingy in the extreme; and unless a man be as Dr. Campbell himself says in a situation where the natives expect something more from him than physick, they never will pay him. I know a native family of wealth and respectability, living about twelve miles from a large military station. The master of the house called a medical officer, at that station, who attended him nearly every day for sometime, having to go each time about twenty four miles. After his patient was restored to health, he received fifty rupees by the hands of a common chuprassee. I afterwards attended that family, and certainly they seemed to repose all confidence in me, for not one of the ladies could have a fit of indigestion nor children a crick in its neck without my being sent for, and although I cured the son, who was almost at death's door, from venereal or rather mercurial disease, yet when I left the station, though they did at last pay me handsomely enough, yet it was with an evident struggle; and I do believe, that had I not been known to be or terms of friendship with an influential public officer, I would not have received a pice. I am told that natives pay handsomely for medical advice at Calcutta. It may be so. I only state things as I have found them, and I think I will be borne out in this opinion by most medical men up the country. All with whom I ever conversed have been of the same way of thinking.

As I have allowed this letter to get beyond all bounds I must abruptly conclude and subscribe myself

Your sincere well-wisher,

VINDEX.

ON NATIVE WANT OF CONFIDENCE IN EUROPEAN MEDICAL PRACTITIONERS.

To the Editor of the India Journal of Medical Science.

Sir,—You will perhaps permit an anonymous correspondent, to make a few remarks upon the alleged want of confidence, of the Natives of India, in European medical skill.

After an experience of eight or ten years in the country, I cannot concur with the originator of the discussion in your columns, that such want of confidence, is by any means general or remarkable. I believe, their confidence is never but justly withheld; and that our professional assistance is not sought, only when our ability to relieve is undoubted; chiefly, because we repel their advances, by our ignorance of their language and customs, and our unconciliating manner. I believe it is only necessary to show an anxiety to relieve them, to obtain abundant evidence of the confidence of the natives in our remedial skill; and, I will add that I am constantly applied to for relief by the inhabitants of the surrounding villages; simply, because I manifest a sincere desire to afford it. To me, therefore the assertion is wholly unwarrantable, that "not one out of fifty European Medical practitioners shall enjoy a tithe of the confidence on his skill that is implicitly reposed in any old woman of a bazar who may choose to exercise the healing art". I cannot doubt that a score of benevolent Surgeons will support me in my opinion, and by their experience prove that the alleged want of confidence of the Natives in European medical skill, is rather a want of confidence in other necessary qualifications of the individual.

17*th May*, 1835. B.

REVIEW.

TRANSACTIONS OF THE MEDICAL AND PHYSICAL SOCIETY OF CALCUTTA, VOL. VII. PART II. PP. 497, THACKER AND CO. CALCUTTA.

Dissertations or Essays, which relate to the extensive British dominions in the East—the countless inhabitants—the history, manners, and customs of these people as well as the physical circumstances of the climate and diseases of the country, must now afford an unceasing source of heart-stirring interest to our brethren in Europe. There are in the Hon'ble Company's service alone upwards of eight hundred Medical men of the first rate talents and acquirements. These gentlemen are scattered over our extensive territories and hold more or less professional appointments of great trust and responsibility. The value of an institution like the Medical and Physical society, founded as it is

upon liberal and independent principles, is inestimable for the important purpose of receiving reports of discoveries in Medical Science from all parts of India; in order to throw light upon the nature and modifications of diseases in tropical climates. The ingenuity and labours of individuals, unless published, can improve and enlarge only their own stock of knowledge: but, through the means afforded by such a publication as the Transactions of the Medical and Physical Society, this is contributed to the general mass, and its benefit made available by the public at large. It is thus diffused over the greater part of the civilized globe, and at once exhibits the progress of Science and the discoveries which result from profound enquiry and extensive practice.

The second part of the seventh volume of the Transactions has just been published. We shall proceed to examine each paper as it appears in its consecutive order; and as our review of these papers is intended for the information of our brethren in Europe who may not have the opportunity of obtaining the volume itself, we trust, we shall be excused for the length of our analytical notices.

Article I.

Descriptions of some rare and curious Plants, By N. Wallich, M. D., F. R. S. *Lond. and Edin. correspondent member of the royal academies of sciences at Paris and Berlin; presented 5th April,* 1834.

Dr. Wallich has now been nearly twenty years Superintendent of the Botanical Garden; we need not therefore express our conviction that every communication from this able and zealous labourer in the Science of Botany in the East will be received with eagerness and delight.

Hitchenia.

Corollæ tubus gracillimus, limbi subbilabiati lobi sex subæquales; labellum sessile. Filamentum simplex; anthera nuda, basi bidenticulata. Capsula membrancea. Semina arillo magno, stellatim lacero suffulta.

Classis Linneana: Monandria monogynia.

Ordo naturalis: Scitamineæ, Br.

Planta elegans, glaucedine densâ obtecta, radice simplici tuberibus longissimè pendulis, spicâ terminali oblongâ, bracteis saccatis regulariter imbricatâ, floribus gracillimis longè exsertis, candidis. Genus intermedium Curcumæ et Hedychio, utroque accedens antherâ nudâ, necnon habitu et inflorescentiâ; huic flore patente exserto, illo indole radicis propinquius.

Nominavi in honorem Dom. Hitchen, Norwicensis, qui per quadraginta et quot excurrunt annos plantas succulentas omnis generis incomparabili cum successu et liberalitate coluit.

Hitchenia Glauca.

Curcuma gloucophylla, Wall Catal. Herbarii Procurationis Amplissimæ Britannicæ Indiæ Orientalis (nunc Societatis Linneanæ Londinensis) n. 6594.

Habitat in collibus ripæ Irawaddi ad Prome, indeque anno 1827 in Hortum Botanicum Calcuttæ allata, ubi floret fructusque profert sub pluviis, a Junio usque ad Septembrim; paullo post tota herba moritur, rursusque enascitur mense Maii insequente.

Dr. Wallich observes that there is an elegance and symmetry about this plant which render it an object of great beauty. A dense pallid, not easily separable bloom covers all its herbaceous parts, especially the leaves, which are large and showy. The upper or naked part of the stem is very tall and slender; it supports at its apex a thick cylindric and erect spike, which is covered in all directions by large, regularly disposed bracts; each forming an open and deep pouch, from the bottom of which rise three or four flowers. These are remarkably long and slender, perfectly white, without smell; that part of their tube which is beyond the pouch measures two inches in length, and spreads almost at a right angle from the spike.

"They are elongated in succession and indiscriminately from the lower as well as the upper part of the spike; but only one opens at a time in each of the pouches, which contain generally a quantity of water derived from rain or dew. The limb of the flower is small, compared with the length of the tube. It opens about dawn of day; and soon after the sun has risen above the horizon, but in cloudy weather not until the afternoon, fecundation has taken place, which is indicated by the outer end of the tube turning down upon itself, drawing the half-closed limb down with it, and forming together a short spiral caused probably by a sort of contraction of the style; after this the corolla immediately withers. The seeds, which are small and not very numerous, are lifted up to the opening of the capsule, and even ejected from it, by the star-like expansion of

the curiously formed arillus, which forces the contents of the capsule to seek a larger space than the cavity of the capsule affords for the seeds, while it is in a contracted state. The membrane of the pollen-globules is so thin and diaphanous, that by means of a lens of $\frac{1}{40}$ inch focus, the motion of the contents is distinctly visible before bursting. This interesting phenomenon was first observed by the illustrious Dr. Brown in other plants, and has been adverted to in his Microscopical Observations, printed in June, 1828.

"The plant thrives remarkably well in a moderately rich garden mould, and is multiplied with ease both by separating the new roots which form annually, and from seeds. The roots begin to shoot early in May, and in the following month, that is shortly before the rainy season, the plant commences blossoming, and continues until August or September."

This plant, in Dr. Wallich's opinion, cannot be applied to any useful purpose except as a garden ornament. Although he thinks, the tubers may contain a proportion of starch or arrowroot.

The following are Dr. Wallich's remarks relative to the production of glaucedo, or bloom of plants.

"Although this substance in a remarkable degree covers all the herbaceous parts of our plant (which in fact derives its specific name from the circumstance), and is in part easily separable, yet it cannot be altogether removed, as is proved by the surface beneath always continuing opaque and of a dull-green pallid colour; nor is a fresh or exterior layer again reproduced when once it has been rubbed off. In the common castor oil plant, the case is quite different. Here the bloom is likewise very copious and easily separable; but after being removed, the surface below appears quite shining, and it is reproduced again as often as it is removed. Several plants of the red variety, which had been raised from seeds sent down from the Botanic Garden at Saharunpore, in 1832, were growing within a few feet from each other in one of the nurseries of the Calcutta garden; they measured from 12 to 14 feet in height. One of these plants was densely covered throughout with glaucedo; all the other individuals were perfectly destitute of it, and had a uniformly red and glossy surface. During the rainy season of the succeeding year, in the months of June, July, and August, the following experiments were made. I rubbed off every particle of bloom from the individual first mentioned, so that the stem, branches, and leaves became quite naked and shining. Within a fortnight a thin layer of bloom had already formed, and in six or eight days more, the surface was as much covered as it had ever been before; this process was several times repeated, and uniformly with the same result. Imagining that the numerous glands which covered the lower half of the petiols, and even the sides of the branches near their insertions, in the other individuals, might be in some manner connected with their having no glaucedo, I removed all these glands, not only from the adult petiols, but likewise from the young shoots as they began to appear; but although I continued doing this for several months in succession, no vestige of bloom was to be seen on any part of their surface. I should observe here that the pair of large sessile glands, which are found at the apex of the petiol of this plant, was present also in the glaucous individuals; their removal had no sensible effect whatever; and it is a curious fact, that all the plants continued perfectly healthy and thriving, producing abundance of flowers and fruits, notwithstanding the repeated treatment they underwent of having their bloom and glands rubbed off. A large inoffensive sort of black ant, which is found annually to frequent this plant in search of the matter exuding from the glands, continued in great numbers on the petiols, notwithstanding the removal of the glands and the complete cicatrization which immediately followed the operation. In Musa glauca, Roxb. the sheathes of the leaves are very thickly covered by a white powderly bloom, which is constantly reproduced."

Alsodeia Bengalensis.

Fruticosa, glaberrima, foliis lanceolatis arguté serrulatis acuminatis subtùs ad axillas nervorum excavato-ciliatis; floribus axillaribus fasciculatis nutantibus, staminibus lævibus antheris apice lato-ligulatis; discover convexo undulato; capsulâ globoso-trigonâ obtusâ trispermâ.

Pentaloba? bengalensis, Wall. Catal. Herb. Ind. Oriental. no. 4896.

Habitat in jugo Pundua, Bengalæ oriental confini, ubi detexit Henricus Bruce; in Hortum Calcuttensem viventes plantas misit Gulielmus Gomez anno 1830. Apud nos primâv ice floruit 1832, capsulasque maturas tulit Martio insequente.

Dr. Wallich observes that this curious plant is a large shrub of the family of the violets, and that Roxburgh's vareca lanceolata and heteroclita Flor Ind. vol. i. p. 448 (vol. ii. p. 246) are species of Alsodeia or Pentaloba.

Viola distans.

Puberula, prostrata, caulibus gracilibus elongatis; foliis longe petiolatis lato cordatis suba-

cutis crenulatis, lobis basis rotundatis; stipulis lanceolatis obsolete denticulatis; floribus longe pedunculatis nutantibus lævibus, calcare brevissimo, sepalis basi integerrimis.

Viola distans, Wall. Cat. Herb. Ind. Or. No. 4022.

Viola serpens, Wall. l. cit. No. 1441 B? (in fol. 249 column. sinistr.) ?

E. montibus Sillet propinquis in Hortum Calcuttæ introduxit Dom. S. P. Stacy fine 1833. Floruit insequente mense Martii.

This species comes very near to Dr. Wallich's Viola Serpens (De Cand. Pondr. vol. i. p. 296) which has been represented in Mr. Royle's Illustrations of Indian Botany, tab. 16, fig. 1st.

"The two species are however quite distinct, and may be easily recognised by attending to the following points: Viola serpens, has very pubescent stems, ovate-cordate, tapering-acuminate leaves, and strongly ciliate-dentate stipules; our plant has almost smooth stems, round-cordate, subobtuse or very slightly pointed leaves, and very obscurely denticulate stipules; the flowers of that are bearded within the acute labellum, the sepals denticulate at the base, and the processes from the two lowermost filaments longish and subulate; in our species the flowers are quite smooth, the labellum obtuse and slightly retuse, the sepals entire, and the staminal processes keel-shaped, subtruncate. Viola serpens has always whitish flowers; those of V. distans are pale violate."

Phlebochiton.

Calyx quinquedentatus. Petala 5, sessilia, dentibus calycinis alternantia, aestivatione imbricantia. Stamina 10, distincta, inserta circum discum annularem perigynum. Ovarium sessile, depresso-quinquelobum, 5-loculare, 5-ovulatum, ovulis pendulis; styli 5 breves, basi vix persistentes; stigmata convexa. Drupa carnosa, obliqua, monopyrena (abortu); putamen coriaceum, lacunoso-resinosum, extus grosse vasculoso-reticulatum, 1-loculare; embryo rectus, exalbuminosus, radiculâ conicâ, superâ.

Classis Linneana: Decandria pentagynia.

Ordo naturalis: Terebinthacearum Juss. tribus Sumachineæ, Decand.

Frutex magnus, late scandens, ramis longissimis nutantibus, foliis alternis impari-pinnatis, plurijugis; floribus parvulis laxe paniculatis; drupis parvis extus carnosis.

Genus Rhoi proximum, differens numero staminum, embryone simpliciter inverso nec funiculi ope sustento, putamine egregie vasculoso. A Mauria discedit ovario haud 1-loculari 1-sporo, stylis uno pluribus, stigmatibus haud crassis angulatis, fructu non umbilicato, demumque radiculâ haud uncinato-descendente. Schinus distat structurâ ovarii et fructus, tandemque radiculâ inferâ longâ. Habitus præterea ab hisce generibus alienus, salvis quibusdam speciebus Rhoes scondentibus. Accedit ad Connaraceas exalbuminosas.

Phlebochiton extensum, Wall.

Robergia hirsuta, Roxb. Hort. Beng. p. 90? Ejusd. Flor. Ind. vol. ii. p. 455?

In sylvis montanis provinciæ Sillet vicinis detexit Franciscus de Silva, plantasque viventes in Hortum Calcuttensem misit anno 1824, ubi læte viget, florens Februario, fructusque proferens maturos Aprili.

Dr. Wallich, on remarking upon this shrub, says—"This is a large and ramous shrub, which rambles extensively over others, and sometimes covers them with its very long, slender and nodding branches. It is well furnished with leaves almost the whole year round. The flowers are very small; but this defect is made up by their number; they constitute numerous long, thin and flaccid, axillary as well as terminal panicles. In general they are hermaphrodite; but as only one shrub out of many which are cultivated in the Botanic Garden has produced fruit, I am led to conclude that they are sometimes polygamous. The bark as well as the green parts possess a slightly resinous quality; at least they emit a faintly aromatic smell on being bruised.

Article II.

On the existence of a new principle (sub-rubrine), in human blood, in the healthy and diseased state, and in the blood of several other Mammalia, By W. B. O'Shaughnessy, M. D., *presented 5th July,* 1834.

Experiments on the blood of subjects in health as well as of those in a state of disease have been extremely numerous. Hallar, Spallanzani, Hunter, Doelinger, Thompson, Hastings, Brande, Kaltenbrenner, Bostock, Marcet, and many other distinguished men have employed much of their time in this interesting branch of chemical research. The attention of the medical practitioner was attracted to the nature and properties of the blood, not as an object of mere curiosity, but from the conviction that by a critical enquiry, prosecuted with the aid of chemistry, a correct knowledge of its constituent principles would prove of considerable service to him in the practice of his profession.

The author of the paper now before us is already well known to the medical profession as having been engaged in making chemical enquiries on an extensive scale relative to the cholera during the first and

second visitations of that disease in London His object was, if possible, to decide the question, whether the alteration of the blood be primary or secondary, and to ascertain what were its conditions in the several stages of that disease.

The paper we are now about to examine is on the existence of a supposed new principle in the blood denominated *sub-rubrine*. While Dr. O'Shaughnessy was engaged in the analysis of some specimens of blood drawn from patients labouring under disease of the spleen, his attention was attracted by some remarkable phenomena which, according to the previous state of his knowledge, were, to him, wholly inexplicable. He had been making an experiment to ascertain the amount of colouring matter in 1,000 grains of spleen blood; but it unfortunately happened that Dr. O'S. was pressed for time, and therefore adopted a mode of analysis calculated to afford more expeditious results than what he "was previously in the habit of employing." Had it not been for his concluding assertion in the last sentence, we would have felt disposed to doubt the value of the experiments made on the 200 samples of blood in cholera to which he alludes. Experiments of this kind are worth nothing when made in haste: on the contrary they tend to injure the fame of our young physician. The profession are generally sceptical in regard to the effects and phenomena said to be produced by means of chemical agents or tests, and hurried experiments like these tend only to increase their scepticism. Dr. O'S. must be aware that the result of the experiments made by other chemists, whilst they differ from one another, also differ materially from those of his experiments on the blood in cholera. We refer particularly to those made by Dr. Clanny, M. M. Rose, Wittflock of Berlin, Kirk of Greenock, Dr. Christie, Dr. Thompson of Glasgow, Professor Herman of Moscow, Dr. Rayer, M. Lassaigne of Paris, M. Gueneau, M. Burruel, and Dr. Davy. Seeing disagreement between the results of the various experiments made by such eminent members of the profession, we may well paraphrase the well known line,—

When chemists differ who shall decide?

But the numerous works which have of late years issued from the Press on juridical or forensic medicine discover the same palpable contradictions in the result of experiments by chemical agency. We are therefore compelled to be cautious how we receive opinions which are to decide the laws that govern the composition and decomposition of substances and the practical processes by which the constituent parts of component substances are discovered. We do not make the foregoing remarks with the view to discourage Dr. O' S. in his interesting labours: but to recommend greater care in his experiments. We are fully aware of the improvements in modern chemistry and in the analysis of animal fluids: but it has not yet attained, even Bostock acknowledges, a degree of accuracy proportioned to the progress of the other departments of science.

To recur however to the paper before us, the new mode of analysis which Dr. O' S. adopted on this occasion is thus described.

It consisted in decanting the serum, and depriving the coagulum of its fibrine, by kneading it in a muslin bag. Alcohol was then added with a view to coagulate and throw down the colouring matter and adhering albumen. The precise amount of this albumen being readily known by data afforded by the analysis of the serum, the amount of pure colouring matter can thus be precisely computed. When the alcohol was added, and the coagulation effected, I threw the mixture on a very fine muslin filter. A very turbid fluid immediately passed through; supposing that the flakes were merely imperfectly coagulated colouring matter, I boiled the turbid fluid, in order to accelerate the separation I expected. To my surprise, however, instead of this effect, the very contrary was produced. The heated fluid, instead of coagulating, became more transparent, and all the turbid flocculi were dissolved when the boiling point was attained. Allowed to cool, the solution again became cloudy, and when at 80° Fahrenheit, a copious deposit, of a faint flesh colour, was obtained. By alternate heating and cooling, whether gradual or sudden, the same effects were indefinitely produced. A portion was filtered and the flaky substance dried, in which state it was soluble

in diluted alcohol, infusible when heated on platinum foil, and insoluble in sulphuric æther.

Dr. O' S. conceived that the preceding facts afforded the strongest evidence of the existence of a previously unknown principle in the blood, and accordingly proceeds to explain the proofs of the speciality of the principle in question.

1. The *animal* principles previously known to exist in human blood, were fibrine, albumen, oil, a compound of albumen and soda, traces of urea, and the red principle, called by some *Hematosine*, by others, simply colouring matter; and which I think should be termed *Rubrine*, in conformity with the radical source from which the names of the other principles have been derived.

2. The substance noticed in the above experiment could not have been fibrine, because all the fibrine had been previously removed.

3. It could not have been albumen, as albumen is coagulated permanently by heat and by alcohol, separately or conjointly; whereas the new substance is soluble in diluted alcohol in the boiling state.

4. It could not have been urea, for urea is soluble in hot and cold alcohol and water; but the new principle was precipitated as its solution cooled. The same remark applies to the albumenate of soda, and from this substance it was still more unequivocally distinguished by numerous other properties, which I shall subsequently detail.

Lastly, it could not have been the oleaginous matter, as this ingredient of the blood requires very strong and hot alcohol for its solution; is fusible by heat, and soluble in cold sulphuric æther. The new principle is soluble in diluted alcohol, *infusible when heated* in the dry state, and *totally insoluble in sulphuric æther*, at any temperature.

It has been shewn by experiments that serum coagulates in a temperature of 160°, when the heat is increased its coagulation progresses, and at length it becomes quite solid. The serum derives this property from containing in solution a principle which chemists call albumen. Now it appears that Dr. O' S. comes to the conclusion that the substance detected in his experiment could not have been albumen, because albumen is coagulated permanently by heat. The Doctor however thought that he had deprived the coagulum of its fibrine by kneading it in a muslin bag; alcohol was then added with the view to coagulate and precipitate the colouring matter and adhering albumen. The precise amount of this albumen, says the Doctor, being already known from data afforded by the analysis of the serum; but these data he has failed to give. When the alcohol was added and the coagulation effected, he threw the mixture in a very fine muslin filter, a very turbid fluid passed through, which he boiled, and, to his surprise, the heated fluid, instead of coagulating, became more transparent &c. &c. Now when Dr. O' S. added the alcohol and effected the coagulation, he doubtless produced a separation, alluded to by Hunter, who states that upon the coagulation of serum by heat he observed that it separated a fluid which was not coagulable by heat, and that he had reason to believe by none of the other means, viz. spirits of wine, &c. Dr. O' S. has not proved that his new substance did not contain albumen and fibrine which requires to be established by further analysis than that adopted by Dr. O' S. Why did he not have recourse to corrosive sublimate as a test for the presence o albumen, which detects it in very small quantities. It has been proved by chemists, that a very diluted solution of corrosive sublimate will produce a cloudy precipitate from a large quantity of water. This would have decided the question whether the substance noticed in Dr. O' S.'s experiment did contain albumen or not. For alluding again to the supposed new substance he says:—

While it differs remarkably from the colouring matter, or *rubrine*, and from the *albumen*, we still find it participating in some of the properties of each, to a degree, that establishes a certain affinity among the entire. While it differs from the rubrine in its relations to heat and its solubility in diluted alcohol, it nevertheless resembles it strongly in the most important and peculiar of its properties, namely *the red colour*. Again, while the new substance differs widely from albumen, also in the mode in which they are affected by heat and alcohol, it still exhibits the same reactions with tincture of galls, ferrocyanate of potassa, some of the acids, the alkalies, and with the gases I have above enumerated.

The latter part of the foregoing extract shews, by the tests of the acids and alkalies, that the existence of some portion of albumen in this supposed new substance is probable. In the commencement of his paper Dr. O' S. mentions his suspicion that the flakes, in the turbid fluid, which had passed through the filter, were merely imperfectly coagulated colouring matter; and says, that he boiled the fluid in order to accelerate the separation. When the heated fluid had been allowed to cool, a copious deposit of faint flesh colour was obtained. Now in the first part of the passage we have just quoted, Dr. O' S. shews that this new substance participates in some of the properties of the colouring matter and the rubrine. He says, "it resembles it strongly in its most important and peculiar properties; viz. the red colour."

Berzelius, says that blood may be regarded as a liquid holding a colouring matter suspended in it, but not dissolved. That the first step in the process of vaccinate analysis should therefore be to separate the suspended matter by filtration. But this method succeeds only to a certain degree, and requires a time so considerable, that the blood undergoes spontaneous changes of composition before the separation can be completed; for notwithstanding all possible care, the colouring matter will either pass through with the fluid portion or by adhering in masses prevent all further percolation. Another mode is that of allowing it to subside by rest: but this also goes on with extreme slowness. The clear supernatant liquor loses its red colour but very gradually, and the colourless portion is not capable of being collected alone. Dr. O' Shaughnessy did not believe that his new substance could be fibrine; because he supposed all the fibrine had been previously removed. We may by the way simply allude to another assertion made by Berzelius that fibrine albumen, and colouring matter resemble each other so closely that he considered them as modifications of one and the same substance. It has been asked whether the iron in the colouring matter gives it the property of absorbing oxygen. It is considered probable; but we never shall arrive at any accurate knowledge of these phenonena without first analyzing these elements of the animal kingdom with the most scrupulous exactness.

On the whole we think that Dr. O' Shaughnessy's experiments are far from being satisfactory, we are sorry that he published this paper when the principle he endeavours to establish is placed in such a questionable position. He himself, however, acknowledges that to complete its history, requires, a minute ultimate analysis, for he did not possess the necessary apparatus; and he very candidly admits that additional researches may derange some of the conclusions at which he had arrived.

HOSPITAL REPORTS.

The following form of report which has been communicated by Dr. Esdaile is of great importance. If other of our Civil Surgeons would furnish similar returns, a tolerably accurate idea of the extent of crime in India might be formed. From the indifference with which the natives regard crime and their dislike to appear in Court as witnesses, we can only expect an approximation towards the truth. It is much to be wished that the security of person and property was such as to admit of a disarming law being imposed as Dr. Esdaile communicated that the great majority of injuries have been inflicted in accidental rencounters where the temptation to the *argumentum ad hominem* was afforded by the ever ready *láthi* (cudgel).

RETURN OF CASES REPORTED UPON TO THE MAGISTRATE, BY THE CIVIL SURGEON, AZIMGURH FROM MARCH 1834, TO MARCH 1835.

Injuries not fatal.	No. of cases	Remarks.
Contused wounds.	54	Inflicted by *láthies*
Sword ditto.	12	Including the loss of an eye, an arm subsequently amputated.

Fractures	8	Inflicted by lathies
Wounds by fire-arms.	2	In one matchlock ball passed through upper part of left lung, and scapula—not likely to recover.
Nose bit off.	1	By a woman's husband; a madman.
Penis cut off.	1	Self inflicted, by a Faqueer, "for the love of God."
Rape.	1	No remains of injury after 15 days; hymen destroyed—girl 9 years old.
Poisoned.	15	Poisoned on the road, for their property, and recovered by timely vomiting.
Total	94	

Fatal cases.	No.	Remarks.
Poisoned	8	Travellers poison'd for their goods, by Dhatura probably.
Strangled	3	1 Man thugged; 1 child strangled by a young Brahmin, for its ornaments; and 1 child strangled by its mother because born with long nails, and therefore supposed to be a devil.
Throat cut.	2	One, a woman who had com-promised the family honour, was murdered by her brother; the other, was a man found in the fields.
Skull fractured.	10	By láthies in affrays.
Concuss. of brain.	2	By ditto.
Compd. fract. of arm.	1	By ditto.
Died after beating.	4	By ditto, in one case the spleen was ruptured.
Sword wounds.	2	One, a Burkundauze murdered by a prisoner; the other, also a Burkundauze died from wounds received in quelling a disturbance.
Suicide.	6	Opium was taken by one woman, after a family quarrel; 2 others threw themselves into wells, from the same cause; a stranger sepoy cut his throat with his sword; a faqueer set fire to himself, to warm the charity of the devout but *overdia* himself; and a Brahman threw himself down a well, that his ghost might haunt his neighbour.
Pilgrims, died of exhaustion on the road.	2	
Died from nat. disease.	3	
Putrid bodies.	4	Probably poisoned, the bodies being stript, as is usual in these cases.
Cause of death not ascertained.	3	
Total	50	

The Mahometans are about one eighth of the population, which is roughly computed at 600,000.

J. ESDAILE, M. D. C. A. S.

Azimghur, April 1835.

Dr. FINCH has kindly favored us with additional cases of Lithotomy with some valuable remarks. Dr. FINCH thought that the Editors of this journal believed that he contended for climate as being the exciting cause of Calculous disease, he however regarded it merely as a pre-disposing cause. In these communications he has stated his opinion more definitively. In the preliminary remarks he refers to the case of Sookee case the 3rd, related in the September number of this journal. He alludes particularly to the proximate cause of calculi. The cases which he now communicates are of young subjects. Our talented correspondent begs to draw attention to the form of a staff which he deems best adapted for young subjects, and has transcribed a few clinical remarks from a lecture by LAWRENCE reported in the *Lancet*.

ADDITIONAL CASES OF LITHOTOMY WITH REMARKS BY CUTHBERT FINCH, M. D.

I have to apologise for having delayed to embrace an earlier occasion to inform you of the anticipated event of the operation on

Sukee case 3d of my former communication as the report ought to have followed quickly on his demise. Sukee died on the 11th July —four days after I forwarded the account of his with the other cases of Lithotomy, and fourteen days after the operation—he was carried off by continued diarrhœa.

I am afraid in the introductory remarks to the history of the former cases that I may have been misunderstood by the concluding of your editorial comments. I stated that it appeared to me that the renunciation *in toto* of the influence of climate in the production of calculous diseases had been equally too easily made as the belief in the exemption of the inhabitants of all warm climates from this class of disorders had been too readily received; and attributing a greater prevalence of calculous complaints in the Upper Provinces to the greater variety and range of temperature incidental to the climate of these Provinces, I rejected the opinion which ascribed their frequency to the use of ottah which if made of good wheat is the most wholesome food for human beings.

I regard variations of temperature incidental to climate only as a predisposing cause of these diseases.

In the prosecution of this enquiry I have endeavoured to ascertain the remote or exciting cause as a means of tracing the proximate cause of calculous formations in the individuals who have applied to me for relief and whose cases are subjoined. In case 1st, the parents distinctly affirm that the first symptoms of the complaints shewed themselves after a surfeit of melons. In case 2nd, the mother said that the child had about the period of its first illness partaken largely of raw vegetable. In case 3rd, the father could assign no irregularity of diet or food to which the disease could be attributed. These results are in support of the opinion that the calculous concretions are of the numerous consequences of indigestion, or in other words that they owe their formation to deranged action of the digestive and assimilating organs induced by the use of food of difficult digestion. Such being the origin of these diseases, it affords a ready explanation of their frequent occurrence in children in this country who eat quantities of raw vegetables, unripe fruits, and food of difficult digestion, as parched gram, &c. &c.

The subjects of the following cases as well as of those formerly transmitted are young. This of course is partly owing to the greater frequency of calculous disorders in childhood, and consequently the greater number of children brought to me for relief but also to the refusal of adults to submit to the pain of the operation though apparently they suffer less than what they undergo on emptying the bladder on a single occasion during the presence of calculi in that vehicle and the dread of an unfortunate result preferring to draw of a miserable existence in the vain search on obtaining relief from other than Surgical means.

In operating on young subjects, the form of the staff is of the greatest consequence—the one I employ differs from those commonly in use. This instrument I had originally and from necessity made up by a lohár-mistree after the form taken by a metallic bougie on its withdrawal from the urethra of a young subject—and it certainly can be introduced into the bladder with greater ease to the patient and facility to myself than others of European manufacture and use which I have lately become possessed of.

The staff I allude to differs from those usually employed in its curve, describing a portion of a lesser circle and the end of the instrument not being prolonged beyond the semi-circle of the curve. The curve of the staff I use forms the segment of a circle of 2½ inches diameter; while that of an imported one a segment of a circle of 4 inches diameter, and is I have since found of the form made use of on one occasion by Mr. Lawrence *(see vol. 2d. Lancet, Feb. 23d* 1824,)—and his remarks are so apposite and afford so clear an exposition of the disadvantages of those usually employed and the advantages of this make, that I cannot do better than transcribe them.

"Instruments of the ordinary shape are not only introduced with difficulty, from their curve being quite different from that described by the urethra of the young subject, but they have the further inconvenience of projecting towards the rectum and bottom of the bladder so as to create additional difficulty and danger in the operation. Mr. Lawrence has seen great embarrassment produced by this circumstance only; it is entirely avoided by employing the kind of staff just described, which lies close under the pubis, and towards the fundus of the bladder, and thus leaves the space for the knife or gorget and the forceps, which is always narrow in the child, quite free.

4th Sept. 1834.—Kobe, age 4. Son of Sukee, caste cahar, employed on a ferry near the village Koojai, zillá Bareilly—has been sickly since he was two years when he had an attack of fever. From this period his parents date the commencement of his present malady, the first indication of which was a change in the appearance of his urine which had become deep coloured. This disappeared after a time; but about 12 months ago was reproduced after he had eaten some melons. Since April he has been subject to great pain and unable to void his urine without much suffering.

The operation was performed on the morning of the 13th instant. In the evening he complained much of the pain of the wound and during the night, the urine came partly by the incision and partly by the penis—On the 14th the urine came wholly by the wound; there was still a good deal of pain in the abdomen and over the site of the bladder where he could not suffer the pressure of the hand; the pulse was quick, the tongue white; skin warm and much thirst. These symptoms were removed by laxatives and frequent fomentations which never failed to relieve him. On the 15th, the urine came again by the urethra. The wound assumed an inflammatory aspect on the 16th, and daily granulated. The boy soon recovered his appetite and left the Hospital on the 26th, fourteen days after the extraction of the stone, with the wound cicatrised and the power of expelling the urine in a full stream per urethram.

The weight of the stone is ℥ij. and its composition—*triple phosphate.*

14*th Sept.* 1834.—Mathaurie, age 5, son of Bukhtour Dhobe—since he was 3 years old his urine has been observed to be of a deep red colour; and the boy has complained of its scalding him in transiter.

His parents cannot account for the origin of the disease which they say first affected their child at Barackpore.

On the 23d the operation was performed; he lost about ℥ vi. of blood, was weak when put to bed, and had some laudanum given to him. He had feverish symptoms on that and next day; but never complained of any pain in the abdomen. On the 26th he was again feverish, his tongue became covered with a white apthous crust, his lips parched and chopped, and his mouth and tongue felt dry. His bowels became slow, but the fœces not unnatural; the urine came readily by the wound which had become pale and flabby, and the boy rapidly emaciated.

I was much afraid from these symptoms, that the boy would fall into the same state as Jokee (case 3d,) mentioned in my former communication; but his spirits never flagged nor did his appetite fail. He was constantly calling for food, and I am glad to say this after a long stay in Hospital than any of the others. He left it with the wound almost healed, and had somewhat recovered his flesh and strength.

The stone was of the same size as the last; but weighed ℥ iij.—its composition—*triple phosphate.*

4*th Oct.* 1834.—Chota, age of 7 years, son of Duleel Dhoneah, resident of Kiara, is reported to have been affected with his present complaint three years, which shewed itself by pain and difficulty of passing his urine on the subsidence of a febrile attack. Within the last year his sufferings have been much aggravated, and he has become subject to prolapsus ani every time he empties the bladder.

On the 7th he complained of pain in the bladder. Fomentations and Ol. Ricini ℥ ij. were prescribed and gave relief; his bowels were moved but once.

On the 8th he was ordered to take a warm bath twice a day for a quarter of an hour each time; and he continued the same remedies till the 13th when he was relieved. On the 22d another paroxysm of pain took place which continued till the 27th. During its continuance he had calomel and laxatives. On the 29th he was free from fever; and on the 31st the stone was extracted;* in the evening the pulse was 104, the urine coming freely by the wound without causing pain.

Nov. 1st, P. 120; no stool since the operation. He had Ol. Ricini ℥ ij. which gave him four motions.

During the 2d and 3d he had feverish symptoms. Fomentations, calomel and castor oil were given; and on the 4th the fever had gone. After the 6th the wound began to contract; and by the 11th it was all but closed, the urine flowing by the natural channel. As the father of the boy was anxious to return home he was allowed to take him with him with strict injunctions to return and bring tidings of his child.

He returned 5 days after, and reported that the wound had healed and the boy was running about the village.

* The weight is ℥ ij. and composition lithate of lime.

THE INDIA
JOURNAL OF MEDICAL SCIENCE.

CALCUTTA, JULY 1, 1835.

Medical College.—On the first of June we had the pleasure of attending Mr. Bramley's inaugural lecture delivered to the native youths of the Calcutta Medical College. Under the impression that the substance of that lecture could not but be interesting to our readers generally, we have made a part of it the leading article in our present number reserving the remainder for the next. It is our intention to give the substance of the complete series of these lectures so soon as they are commenced upon, not only with the view to afford to the students of the college the benefit of studying these lectures in

print, but also for the information of native medical assistants scattered throughout the country.

We were much pleased at seeing the lecture so well attended. There were upwards of two hundred native gentlemen present; and among the visitors we observed Sir Edward Ryan, Mr. Shakespeare, a great number of medical gentlemen, and many distinguished in the literary circle of Calcutta. Mr. Bramley is admirably fitted for the post to which he has been called. We admire his simple yet nervous style. There is an easy condescension in his manner which cannot fail to gain the affection and command the respect of his pupils. He rivets the attention of his hearers by judicious pauses, and displays, without being too energetic, an animation which discovers the deep interest he takes in his subject and the anxious desire he feels of securing success.

We have always felt deeply interested in the cause of education, and have thereby become personally acquainted with most of the native students in Calcutta. On the present occasion we feel much satisfaction in being able to say, that their acquirements, whether mathematical, classical, or literary, are in numerous instances not to be surpassed by the students in any of the seminaries of Europe. To become convinced that there is no exaggeration in this statement one has only to attend the examinations of the Hindoo College, of the General Assembly's School, and the Oriental Academy. Most of the students now in the Medical College are possessed of these high attainments. They have few superstitions or prejudices, and are accustomed to regard with sorrow the moral degradation of their countrymen. We have not the least doubt they will, without any scruple of conscience, dissect the human body and enter heart and soul into the study of anatomical science.

We have however yet to learn what system of medical education is to be adopted at this college. Is it intended to cultivate the science of medicine and surgery in all their branches, under the exclusive guidance of Messrs. Bramley and Goodeve? If so, we do not hesitate to say that the means are disproportionate to the ends proposed to be attained by such an excellent institution. That Messrs. Bramley and Goodeve are men of education and high professional talents no one can for a moment question: but is it to be supposed that these two gentlemen can teach the several branches of medical education in this country, which in Europe occupy the constant toil of at least five professors? If the medical education in this country is to be a superficial one, we are convinced the pupils of such a school will do more harm than good; for if in literature "a little learning be a dangerous thing," how much more so in medicine! Besides professors of anatomy, there should be those of materia medica, botany, pharmacy, chemistry, midwifery, surgery, as well as a clinical lecturer, and one on the practice of medicine. We well remember that Carpne a professor of anatomy in London, with two hundred pupils, considered the duty of teaching anatomy only so arduous that he had no spare time for any other occupation. Brookes also devoted the whole of his time to this one branch of medical education. Professors of chemistry, who instruct in general and pharmaceutic chemistry at a chemical laboratory, in like manner find that they have quite enough to do, and no time to spare for lectures on the other branches of medical science. Mr. Bramley in his inaugural lecture has very properly made some pertinent and judicious observations on the effects of empiricism, which he endeavored strongly to impress on the minds of his auditors. To guard against such an evil we would recommend him to suggest to the higher authorities the necessity of more teachers.

Another important defect which we were sorry to observe in this college was the absence, from Mr. Bramley's class, of all others except the natives. In this country where there are so few offsprings of European parents, we cannot but look upon

such exclusion and invidious distinction as very unadvisable. The intercourse between the natives of India and Europeans ought by all means to be encouraged. The former would then imbibe the energetic and aspiring spirit of the latter, and be largely benefited by the interchange of sentiments and opinions.

On the whole, therefore, it is our opinion, that the plan on which the college appears at present to be based is radically defective, and that unless it be improved its object of ultimate benefit will be defeated. After the most efficient course of instruction the pupils will require much experience; for an eminent writer has observed "that it is a gross ignorance of the real nature of medical experience and of the qualities necessary to constitute a solid medical observer that makes the press teem with such swarms of still-born crudities on medical subjects." They who have had no experience never consider the immense difference between an accurate observation of the uniform appearances of dead matter and of the phenomena of the animal body. In this field however there are some whose intellects are not capable of ascertaining the causes and effects of the complete movements of the animal body, without much preliminary instruction and habits of solid reasoning. It will therefore be necessary to give the Hindoo youth a clear notion of what is really entitled to the name of experience in medicine, in order that he may be aware of those difficulties which every moment perplex even the acutest observer, and make him not only diffident of his own conclusions but reluctant in drawing general conclusions from particular facts. Supposing, therefore, that the system of education at the new college be improved, still a familiar acquaintance with the various diseases amidst the diversities of characters, habits, and customs of men, under the influence of various climates and circumstances, the changes of seasons and temperatures, together with some intercourse in practice and interchange of opinions with the experienced practitioners of the day is deemed necessary to establish and ground the native in professional knowledge. Many years must consequently elapse before he can expect to be ranked among those who are distinguished for practical ability in medicine and surgery. The native mind has indeed the power of perceiving with readiness and accuracy; but it is not in the habit of examining and meditating or reasoning upon what it has perceived. Almost every man can learn and repeat; but it is only the intellectual mind that can reason upon the objects submitted for its contemplation, and pursue a fact or apply a principle. This soundness and comprehension of the mind is acquired, and must be taught to the natives before they will possess that strength of observation and those subtilities of reasoning which are so indispensable in a profession requiring deep investigation, in order to guard against falling into absurdity on the one hand and presumption on the other.

But before we conclude our remarks upon this new college, we cannot refrain from expressing our surprise at the position in which medical examiners or rather assistants are placed. It would appear that the committee of education are the examiners of candidates for the practice of medicine and surgery, and that medical men are only to be ready to afford medical advice if required. To give to the examination a really medical character, we think, the assistants in this case should become the principals and the principals the assistants. But our real opinion is that the distinguished individuals who compose the board should not be required at all during this trying moment to the medical students.

Abolition of two Superintending Surgeoncies.—We hear nothing but the expressions of alarm and deep regret at the recent orders, directing the abolition of the two important situations of Superintending Surgeons at Barrackpoor and Allahabad. At the last meeting of the Committee of management of the Medical Fund it was actually proposed to suspend the payment of subscrip-

tions, because the hope which the members of the Medical service had once entertained of returning from it was defeated: but before they carry any hasty resolution into effect, we would implore its members to pause, and await the result of their memorials which have been forwarded from the Presidency, Benares, Allahabad, and Agra Divisions of the Army. The Hon'ble Court, we trust, will grant the prayer of these Petitions; lest a continuance of such complaints deter well educated and talented men from entering their service, and thus lessen its present high character for respectability. We are however satisfied that when these grievances are represented in respectful and temperate language they will be redressed. But we also have a duty to perform—we must not be silent on a subject of such moment to the prospects of the Medical Service. Whilst we proceed to offer our opinion on the injurious tendency of these orders not only to medical men individually, but to the public service also, we crave the indulgence of the higher authorities.

In the first place we would solicit the attention to the great general principle which we believe has been universally acknowledged, and proved by experience to be indispensable in order to render efficient any Medical Department of an extensive Civil and Military service, especially in a foreign tropical and uncongenial climate. The principle to which we allude, consists in that salutary and efficient controul and superintendence with which the seniors of so important a department are invested. The late Duke of York, we believe, was the first to lay down this principle in arranging the medical concerns of the army. He maintained, that in order to insure efficient Directors and Inspectors, particular care and attention should be exercised. These should be vested with full power to adopt the most effective measures for supplying a duly qualified and efficient Medical Staff to Armies, Regiments and Posts. These Directors, having the fullest information of the designs both of the Government and their immediate Military Commanders, should be authorized and enabled to proportion with exactness the means to the ends of the service; so that being duly furnished with this knowledge and power, they would be justly held responsible and be without excuse if the medical duties and details were inefficiently conducted.

The history of the Peninsular Campaign sufficiently proves that the originating causes of sickness not only depend upon the constitution of the soldier, but upon his diet, his quartering and his parade duties, the particular nature of the service, the climate, and the season of the year: these were obvious causes, and their effects could be ascertained so as to admit of accurate calculation being made of probable consequences, or in other words, the practical experienced Medical man could foresee these effects with such certainty, that it was considered as amounting to a neglect of duty if the Director of the Medical Department did not anticipate them. Under the authority and by the experience and fore-knowledge of the Superintendent means of prevention may be put into prompt execution, and thus many serious visitations of alarming disease materially mitigated or even averted altogether: the suitable remedies are always prepared to combat the visitation, they are in readiness, and at command; measured in proper quantities, and proportioned exactly to the ends in view. Whereas by the recent abolition of two superintendencies in the medical service of this establishment it must be obvious that there cannot possibly exist any such salutary control; and very injurious consequences must follow—That such Control and Superintendence were always intended by the Hon'ble Court to be committed to the seniors of the Medical Department is obvious from an order of the Hon'ble Court published in General Orders 27th June 1796, where they direct the Medical Board to Superintend, under the Governor General in Council and the Commander in Chief, the Medical Department; and order all recommendations and applications for promotion in the Medical service to go thro' the Medical Board, who were directed to forward them to the Commander in Chief with their

remarks. Besides all recommendations for vacancies and promotions in the Military line were to originate with the Medical Board, and to be laid before the Governor General in Council by the Commander in Chief. It is obvious that none can be more fitted to recommend than those who are acquainted with professional talents, and who by experience must know how to keep the materiel of a moving or a standing army in efficient order, by preserving its health, adopting suitable provisions for disembarrassing the Military movements, removing its inefficient parts, rewarding merit and zeal, and exciting emulation by means of well organized arrangements. The salutary control however has been gradually withdrawn, and with the recent abolition of two Medical Superintendencies feelings of apprehension and alarm are no longer concealed, lest it may be in contemplation to *reduce* still further not only *their* number but that of the Members of the Medical Board. Since their power and influence are already so materially lessened by not allowing recommendations and applications for promotion in the Medical department, to go up through them.

We are aware that this withdrawal of powers once vested in the members of the Medical Board is resorted to with the view to avert the inconvenience arising from promotion by right of seniority, and that the principle of rising by a regular gradation to the higher ranks does not secure to the state talent, activity, and zeal—qualities indispensable in the chief directors of an extensive Medical department. When these important offices are bestowed upon seniority alone, it must in some instances happen that they will fall into the hands of persons who, though grey with years in the service, have not experience sufficient to compensate for want of genius and energy. We are no advocates for this mode of promotion by seniority to the power of supervision and control, neither do we advocate the system of Boards ; but so long as no other mode exists, of rewarding length of service, we submit it would be impolitic to withdraw legitimate powers from the members of the Board.

It is indeed manifest that a Medical department so heterogeneous in its organization must soon become inefficient if its direction were placed in other hands than those of medical men, who are not only responsible for active supervision but are practically and theoretically acquainted with all the medical details and concerns of the Army.

The Marquis of Hastings, in directing the publication of the new code of Medical regulations in 1815, endeavoured to impress upon the minds of every member of the medical service the sense which the Government then entertained of the responsible and important duties of Superintending Surgeons. His lordship declared that the responsiblity vested in them would be best appreciated by contemplating the extensive benefits that result to the public service, and to the important interests of humanity by a strict, constant, and minute exercise of the superintending controul and authority with which they were vested and on which their continuance in Office or otherwise must absolutely depend; and further that the succession to the appointments was not dependent on seniority alone, but that the selection was to be made with reference to established character for distinguished zeal, strict assiduity, and professional ability. So arduous and extensive did his lordship deem the duties of the existing limited number of superintending surgeons that we have been informed he suggested to the council in 1818 the expediency of appointing eight additional deputy superintending surgeons for the purpose of making the tour of inspecting jails and hospitals only, while the principals were to be occupied in the more important duties of receiving the reports and superintending the Medical management of European Regiments and station Hospitals at the Head Quarters of the Divisions of the army. The members of this service have therefore been expecting orders from the Hon'ble the Court of Directors sanctioning the additional 8 Deputy Superintending Surgeons to the establishment in order to relieve the number of Superintending Surgeons already in employ of some part of their onerous duties.

We shall now proceed to shew, with reference to the Barrackpore and Cawnpore divisions, that they are so extensive that it is beyond all physical possibility for two individuals to perform the duties which devolve on them.

By the abolition of the office of superintending surgeon of Berhampore, and the addition of the duties of that circle to those of the superintending surgeon at Barrackpore, the latter will have the following stations to visit, viz. Assam, Tipperah, Chittagong, Akyab, Sandoway, Kyouk Phyoo, Pooree, Moulmein, Cuttack, Balasore, Midnapore, Tumlook, Bancoorah, Burdwan, Beerbhoom, Nuddea, Moorshedabad, Bauleah, Malda, Pubna, Comerkhally, Dacca, Jelalpore, Backergunje, Barasal, Jessore, Bagundee, Chirrapoonjee, Gowattee, Goalparah, Bishnath, Rungpore, Jumaulpore, Bishut, Jungypore, Rajshay, Bulooah, Baraset, Hidgelee, Mimensing, Dinajpore, Berhampore, Dum-Dum, and Chinsurah. In this division there are two King's regiments, a detachment of the Hon'ble Company's European Artillery, and, including native regiments, there are 15,439 fighting men. The duties of the superintending Surgeon according to G. O. G. G. 28th May 1807, are to visit each Hospital European and Native within his district as often as may be practicable and necessary, besides making regular quarterly visits to each European Hospital commencing at such period of time as the Commanding Officer of the district shall direct to report on the state of each Hospital to the Commander in Chief through the Commanding Officer and also direct to the Medical Board for the information of Government, to observe that the medical regulations in every respect are strictly attended to, to furnish the regimental Surgeons with such instructions as he may deem necessary in respect to the medical treatment of the sick, carefully to inspect the quality and quantity of the diet and the condition and state of cleanliness of the clothing and bedding of the patients, to regulate by general directions every circumstance connected with their management, comforts and attendance, to report on the state of the buildings appropriated to the purposes of regimental hospitals, and to exercise the strictest scrutiny in giving his sanction to the indents for wine, which he is considered able to check by reference to the average monthly expenditure of preceding years, as well as to the medical diaries or journals. He is held responsible for any expenditure of that article beyond the maximum quantity. All Indents for Europe and native medicines, for the use of all European and native corps and civil stations, are presented to him. In addition to his personal observation of the general course of practice, and prevalence of diseases in the Hospitals under his superintendence, he is also considered to have the further means of checking the indents for medical stores and instruments, by reference to the registry of prescriptions and practice which are entered in the journals or diaries of Hospitals respectively. Moreover copies of all indents made on the field medical depots, are directed to be regularly forwarded by Surgeons through him, likewise quarterly reports of the receipts and issues of medical stores and of the balance remaining in store are regularly transmitted in duplicate from the field depots to him. Whenever European troops are ordered for field service the superintending Surgeon of the division if not upon the spot is directed by the standing Regulations (*see Carrol's Code, chap. xvii.*) to repair thither without delay, when he is to prepare indents for such proportion of hospital tents and requisite carriage as may in his judgment be necessary for corps or detachments respectively according to the fixed proportions of the service, and generally to use his best endeavours to forward all the arrangements required from the medical departments with all practicable expedition. In like manner the stores of Europe medicine, medical stores and instruments to accompany troops when ordered to march, are in due proportion to be regulated by him. The doolies in use and the dooly bearers in the service &c. and all other descriptions of carriage of the army are

always mustered by him and placed entirely under his management and control, and such disposition and allotment of the whole is made from time to time as the circumstances of the sick or the exigencies of the service may seem to him to require. Hospital clothing, bedding, wine and diet, personal servants appointed to the European sick, charpoys of a *proper* description are furnished not only under communications with, but under directions from *him*. These various duties require much writing and many official reports, and the various documents are directed to be carefully preserved in his office and held in constant readiness for transmission to the Medical Board, whenever that authority may consider it necessary or expedient to call for them.

After this exposition of the multifarious duties which devolve on every superintending Surgeon we need not enlarge on the difficulty, if not impossibility, of one person superintending the Barrackpore circle embracing nearly all the provinces in Bengal

The distance from Malda to Moulmein, the northern and southern extremities of this circle, is about 908 miles, and from Cuttack to Chirrapoongee in an eastern and western direction about 600 miles; about 54480 square miles. An annual inspection of all the hospitals within such an extensive range, the collection of all the reports, and the settlement of all hospital arrangements can scarcely be effected by one individual.

How is he to make frequent personal inspections of all regimental and other hospitals within his respective division, to enforce the unremitting attention to their professional duties on all the subordinate medical staff under his authority, and to inspect with rigid attention the medical diaries and registers, enforcing strict conformity to the forms prescribed, to make monthly reports of the general state of hospitals to the medical board; with general reports accompanied by monthly returns of the sick in hospital, together with observations on all points relating to the hospital department as may appear necessary to be brought under the notice of the medical board, transmitting notices of any remarkable cases or diseases that may occur in medical practice together with copies of any particular instructions for the regulation of the hospital duties. Even the state of the cooking utensils with the hospitals is directed to be a constant object of his attention.

But the General Order in which the abolition of the situation of Superintending Surgeon at Berhampore appeared states that the reduction was owing to the removal of the European regiment from that station; the regiment was not however removed from the strength of the army, but only a little lower down to Chinsurah a distance of about 90 miles.

Under the view which we take of the responsible and important duties of a superintending Surgeon, we believe that it is impossible with advantage to the service and credit to themselves, that the circle now described could be efficiently superintended under a less number than one superintending surgeon and *two* Deputies. One being stationed at Moulmein embracing within his sphere of control the coast of Aracan towards Chittagong and Dacca on one side, and Poorie and Cuttack on the other; and another to be stationed at Hazareebag embracing Malda and Berhampore and the civil hospitals and regiments from that station to Bunkoorah, leaving the centre of the circle for the management of the superintending Surgeon of Barrackpore.

We do not think that such an arrangement could occasion any great extra public expence. The difference between the allowance of a regimental and that of a superintending Surgeon is 900 rupees per mensem; in the lower provinces a sum which would probably, nay, we think certainly, be more than indemnified by those economical and prudential arrangements which would result from strict medical inspection into the expenditure of hospital wines, stores, &c. &c. and by enforcing strict observance in the subordinate departments for the performance of hospital duties, which must invariably relax where there is no control or superintendence. But we proceed to advert to

the other superintendent Surgeoncy which has been abolished, namely that of Allahabad the duties of which have been added to those of the Cawnpore circle. The stations now, within the latter are, first Cawnpore, which station contain,H. M. 16th lancers, 16th foot, two regiments of light native cavalry, and three regts. of native infantry, besides large civil establishments. These alone, therefore, afford work enough for one superintending Surgeon, but in addition to these duties there are attached other stations, namely Allahabad (the seat of the 4th presidency) Bandah, Futtehpore, Hameerpore Futtyghur, Mynpooree, Etawah, Pertaubghur, and Lucknow districts (besides jails) containing 14,445 fighting men; thus the multiplied duties now laid upon the superintending Surgeon of Cawnpore are such as completely to render the attempt impracticable to perform beyond one-third of them efficiently. Indeed so obvious must the fact appear after our explanation, that we consider it needless to dwell longer upon this part of our subject, and hasten to conclude these lengthened observations by adverting to the effects of these reductions as they personally regard the promotion and retirement of the members of the medical service, protracting the advancement, especially of the six senior Surgeons, who have been already 30 years in the service. We beg to draw attention to the fact; that is the furlough regulations. The retirement of members of the Medical Board and Superintending Surgeons is to take place after 20 years, including those for furlough; the application of this term of servitude could never therefore have been made with the knowledge that no Surgeon can retire under 30 years' service, and we beg particularly to state that in consequence of recent reductions a member of the Board cannot retire until or after 40 years' service double the period specified by the furlough regulations.

In the King's service, an equality subsists between the medical and other branches of the Army: it may not be deemed unreasonable therefore to anticipate a similar equality between the two branches in this. The Military officer enters the service at the age of sixteen, without any previous professional preparation, and without being at any great expence save that incurred merely for his outfit and passage money; while the medical man enters it at the age of twenty-two, after having spent at a very moderate calculation including outfit and passage money £1000, to qualify himself by medical education for the proper performance of the duties of the situation which he is to hold. This capital being placed at interest at the rate of 8 per cent., known to be given in Calcutta on excellent security, will in eight years amount to nearly £1,850, and this again will give a yearly income of about £150 per annum. While the medical man having sunk the same on education, as the military officer enters the service six years later than the Cadet on the bare pay and allowances of the Lieutenant; he must then be six years more in the service before he can obtain medical charge of a regiment. The military officer after a shorter period of actual service, by six or eight years, than members of the medical board, who entered the country six years later in life, can retire on an income one half greater than the latter. The same inequality exists throughout all the different grades, which has frequently been adduced; proving, that the medical man neither enters, nor retires from the service under equal advantages with his military brethren, who have never been too liberally rewarded, as is fully proved by the very small portion of the officers of the Indian army, who have ever been able either by serving, or by the Government pension to retire from the service.

It will be readily admitted that it is not to be supposed that the members of a liberal and scientific profession would relinquish every hope ambition might hold out of riches and honor as the reward of their labours in their native land to accept of an uncertain subsistence in a remote and unhealthy quarter of the globe, and consent to exercise a profession requiring constant exposure to the injurious effects of the climate, continually involving

the peril of life itself; when at an earlier age, and with less interest they could have obtained the more desirable appointment of Cadet, and when we consider the peculiarity of the Indian service, the expensive nature of the country, the most so in the world, it must be acknowledged that medical men are entitled to a superior rate of pay and that this becomes more obvious when it is taken into consideration that they have to transport themselves to and from a distant country at their own cost, that before reporting their arrival to the Town Major of the presidency to which they belong, they receive no pay; that before having served six years in the event of sickness and impaired constitution rendering it impossible for them to remain in that service, no provision whatever is made for them; and that, should the same event occur after their having served six years, all that the service allows them to receive or hope for to support them under so heavy a calamity is the half pay of Ensign. But we must end, as we have shewn enough to induce, the authorities at home and, we trust, the Government in this country to take into their serious consideration the depressing prospects of their medical servants.

In a future number we shall consider the constitution of the Medical department of the King's Army, and afterwards that of the Hon'ble Company's, and substantiate the truth of the lines in Pope's Homer, that

"A wise Physician skilled in wounds to heal.
Is more than armies to the public weal."

CURNIN'S PLAN WITH HOUGH'S SUGGESTIONS FOR A MEDICAL FUND.—The scheme of the Retiring Fund, submitted for the Medical department by Mr. CURNIN, has caused much disappointment to the Medical Fund Committee. Mr. CURNIN is of opinion that the Hon'ble the Court of Directors might be disposed to sanction their having a retiring pension, per annum of

360 £ for 17 yrs. service,		455 for 21 years service.	
380	18	500	22
405	19	660	25
430	20	825	28

and 1000£ for 31 years' service, on their subscribing for the first year, 10 rupees per mensem

2d	10	17th	35
3d	10	18th	35
4th	150	19th	150
5th	15	20th	40
6th	15	21st	40
7th	20	22d	45
8th	20	23d	45
9th	150	24th	150
10th	25	25th	50
11th	25	26th	50
12th	25	27th	50
13th	30	28th	55
14th	150	29th	150
15th	30	30th	55
16th	35		

and for the rest of the time during which an officer may continue on the establishment, a monthly subscription of 60 Rupees.

To adapt this to the case of officers who are now in the service those who have served but

	Rs.		Rs.
1 yr. will have to pay	124	9 yrs will have to pay	6604
2 years	258	10	7,570
3	409	11	8,656
4	2,295	12	9,330
5	2,701	13	11,216
6	3,150	14	14,224
7	3,707	15	16,077
8	4,323	16	18,209

and he who has served 17 years will have to pay 20,582 Rupees before he can claim the full advantage of the Fund.

From the foregoing table it is obvious that Mr. CURNIN is ignorant of the circumstances of the members of the Medical department on the Bengal establishment. In the actual state of the service it is impracticable for its junior members to pay every fourth year 150 Rs. On an average, the pay of an Assistant Surgeon of that standing does not amount to more than 280 or 300 Rs. per month. Moreover the sum required to be paid Rs. 20,582 after 17 year's service for an Annuity of £164 per annum, in addition to he present pension, is unworthy of the consideration of the medical service. In the first place few have so large a sum of money to give; and therefore few only could retire, by which promotion could not be accelerated on such a scheme. And in the second place, even the few who might realize the amount of premium, would not, we should think, consider the Annuity worth so large a sum of money. Adverting, however, to Mr. CURNIN's scheme of a fund for the army; we have nothing to advance against his arithmetical data or the great

praise which has been so generally and justly bestowed on them and his able and indefatigable exertions. We would however strongly urge upon his attention the debts of the army, as shewn in the recently published statements of the Insolvent houses of Agency. So far as the junior members of the service, who have arrived in India since 1828, who have resided at stations where full batta has been allowed, and have not encountered expensive campaigns, loss of bungalows, &c. are concerned, his own scheme may be feasible. And we have no doubt the Court of Directors will sanction it, but it will never be brought into practical operation so as to facilitate promotion unless the boon, which we hear has been conceded to the civil service, be granted also to the army; namely, that of reducing the rate of premium one-half, or the whole by which the debtor might compromise with his creditor.

But we beg it may be distinctly understood, that we do not attempt to refute Mr. CURNIN's proposition that five rupees per month paid in the first year entitles the person after 25 years to a pension of 62,316 rupees: and if paid by a person who has been 10 years in the service to a pension of 25,046 rupees. Or that a Captain may calculate upon his majority in eight years' having served only 19 years or that this rapid promotion will be gained solely thro' the Agency of the Fund, should that be brought into operation. All we maintain is, that it is beyond the means of the army to contribute the required donation: and therefore we fear this generation at least will not be able to benefit by the fund on Mr. CURNIN's plan. If, however, any considerable portion of the army were possessed of the means necessary for the accomplishment of such a plan, we would admit the probability of its being carried into effect. But, as we stated before, the circumstances of the army are much against its success. During the late failures the accounts of one agency house alone, viz. that of Messrs. Alexander and Co. exhibited a balance of £1,400,000 against the Military Service. From this we are induced to think that the whole army is deeply involved, and to infer the impracticability of Mr. Curnin's plan.

We beg to submit for the consideration of our readers the following correspondence on this subject which has been forwarded through the Military Secretary to the Hon'ble Governor General to Mr. CURNIN who has kindly given his sanction to its publication in our journal.

To Captain Smythe, Military Secretary to the Hon'ble the Governor General. Calcutta.

Sir,—Having obtained the concurrence of the medical officers of the station and division of Saugor in the view contained in the enclosed paper relative to the incorporation of the Medical and Military Retiring Funds which it seems is in agitation, to be submitted for Mr. Curnin's arrangement; I beg you will do me the favor to forward to that gentleman the accompanying statement containing an examination of some of the grounds upon which the scheme embracing the medical departments of the three presidencies should be based.

I have the honor to be, Sir,
Your most obedt. servt.
15*th May*, 1835. H. HOUGH.
Supt. Surgn. Saugor Divn.

To JOHN CURNIN, ESQR.

Sir,—Having been informed, that, the desire which recently actuated my brother officers at the presidency to invite you to investigate the mode by which their expectations of deriving some improvements in the prospects of the medical department may be attained, has induced you to be so kind as to offer your valuable services in an endeavour to unite the interests of the medical with those of the military branch of the service in the formation of a General Military Retiring Fund; I beg to be permitted to submit the accompanying examination of some points that may be serviceable to this enquiry.

I am aware of the difficulties with which you must necessarily find yourself surrounded in approaching a subject that seems to exhibit a primâ facie intractability: and although I have no doubt that the medical gentlemen at the presidency are much more competent than myself to take a proper and enlarged view of so perplexing a question as the one you have been solicited to solve, I would yet fain hope, that the accompanying estimates and views may be found to be, in some point at least, relevant; and that some of the elements of

the accompanying sketch may serve to illustrate some of the difficulties that seem to be inseparable from a question of this nature.

I have availed myself of the privilege which it is understood is accorded to officers of addressing you on this subject through the channel of the Military Secretary to the Hon'ble the Governor General, and

I have the honor to remain, Sir,
Your very obdt. & humble servt.
15*th May*, 1835. H. Hough.
Superintending Surgeon,
Saugor Division of the Army.

An Examination of some of the grounds between the present position and future prospects of medical officers on the Bengal establishment as contrasted with the actual position and prospects of the Military branch of the service; subserving the proposed intention of amalgamating the interests of both in the formation of a General Military Retiring Fund.

In order to ascertain what amount of contributions ought to be made by medical officers, to the end that they be collectively and individually assessed together with the Military officers, on a scale of equality, it is requisite, that the various sources of income of each branch of the service should be examined separately; or, that these sources of emolument should be collated so as to afford a 'precis' of the present position and future prospects of each class of public servants.

2. It is at all times invidious to draw comparisons between the remunerations of two classes of public servants: but in the present instance, this comparison becomes one of imperative necessity, without which, indeed, it would be more than idle to go into the enquiry.

3. A medical man not only comes later into the service; but, if he even arrive in the country at the same age as the Cadet, his life is more perilled, as it is found to be in all countries; or, he is not likely to withstand with impunity for an equal period that wear and tear of constitution, to which his professional employ renders him obnoxious.

That a greater mortality reigns amongst members of the medical profession than others is a well ascertained fact, which no one pretends to dispute.

4. The medical officer's education, is a second education, which costs him, or his friends not less than one thousand pounds. He therefore enters the service with a capital that the Cadet does not require. The medical officer often enters the service as late as the Chaplain having received an education equally protracted, and expensive and sometimes more so. According to the statement of such a result, as is exhibited in Mr. Curnin's plan for a Retiring Fund it seems, that, a present payment of £100 to be made by a considerable body of mutual assurers would, at the end of a term of 25 years and all the survivors attaining the age of 43 years, putting also the above sum at 6 per cent. compound interest entitle each of the survivors to an annuity of £140. If this be admitted or any thing approaching it, it must follow, that a medical officer after 25 years' service in India should be entitled to a much larger annuity from the state than the Military officer.—*(See last Par. note G.)*

5. It is a well known fact that a Lieut. Colonel in H. M. Service often pays for his Commission as such £5,000. Yet it is equally well known that the Surgeon of the same Corps receives not only a larger daily stipend from the state than the Lieut. Col. Commanding the Regiments, but that he also receives a superior pension after having served 25 years: and yet the Surgeon, it should seem has advanced, in the expense of his education or less capital than the Lieut. Colonel by £4,000.

6. It will be objected, that Medical Officers on entering into the Company's service bring with them a knowledge of most of the advantages and disadvantages of the Indian system of remuneration.

7. The answer to this is, that the *older* Medical officers at least, or a greater many of them, were admitted into the service when professional emoluments were much greater than they are in the present day—and that their present prospects are greatly inferior to the military as will be made amply manifest in the appendix to this paper.

8. It is not a little curious, that under these circumstances the average remuneration for long services should be for the military officers at the rate of £551. 9—and for the medical only £ 242, 12—making a difference of £. 208. 17 to the disadvantage of the latter with reference to retired medical officers of the Bengal army especially.

9. Another objection will be made to, the employment of what may be considered as too free a use of interpolation, on the assumption of imperfect data.—

10. This objection will no doubt be urged against the assumption, that the military Department derives emoluments from Local corps and Political and Civil employ.

yearly Sa. Rs. 5,00,000, which it would not be easy to prove. To this the writer has to reply that not only this sum which has been given in the estimate in the appendix, but also another sum not less than Rs. 3,12,338 may be deducted from the estimate on the score of erroneous excess, and yet leave the over-age income or advantages of the military Branch of the service on a par with the medical Department still leaving the medical officer in his future prospects worse off than the Military by the difference of average retiring pension £551-£242 or more than 56 per cent under par.

11. Again the military officer possesses this further advantage over the medical officer, viz. that while the latter is actually making a large annual outlay to acquire a competent knowledge of his profession commonly requiring 7 years for its completion, the military officer is learning his at the expense of the state; and is not considered as equal to the performance of his ordinary duties, until after the lapse of six years of such instruction.

12. It is a due consideration of this difference as combined with other important differences, that should lead to the conviction of the propriety of according to the medical officer not only on original larger income from the state, but also a larger retiring pension.—(*See note F table.*)

13. The privilege of retiring from the service after 17 years' actual service in India instead of 22 years, or 5 years less than the medical officer is a privilege that not one person in twenty generally can avail himself of, for the very reasons assigned in this examination.

14. If no other proof was required to show that medical officers are compelled to serve a much longer period than even 22 years, the fact that chaplains are seldom in a condition to accept their superior retiring pensions of Major until after a like period; although on entering the service, chaplains receive the income of Majors and Lieut. Colonels not in command of Regiments, and are permitted to retire on the pension of Major after twelve years' actual services as such in India.

15. All these circumstances, it is humbly presumed, may be permitted to have their due weight in proportioning the scale of assessment that may be proposed to be made upon the body of Medical officers either at this or at any other presidency. The Medical Department would perhaps be allowed most conveniently the same amount, but each decreasing monthly subscriptions of Medical officers by Classes.

240 Assistant Surgeons.

Class			
1	84	10	840
2	70	13	910
3	50	18	900
4	36	25	900

3,550 x 12 = 42,600

Class	Surgeons		
1	48	40	1,920
2	32	60	1,920
3	20	96	1,920
4	12	160	1,920

7,680 x 12 = 92,160

Total yearly subscriptions Rs..... 1,34,760

16. If it should ever become the determination of the Home authorities to assign a fixed sum as a yearly payment in lieu of pensions and off reckoning to the officers of the army, it is respectfully submitted that the Medical Department may experience a similar arrangement, and that the members of this body do contribute yearly a sum equal to perpetuate a retiring Fund upon a footing of equality with those of the army generally.

17. It remains to be remarked. that on occasions of making calls upon the Medical Department to subscribe sums of money for any Fund established in India, The Honourable Court of Directors have considered the whole of the Medical List of the Bengal establishment as a body which has been likened to eighteen Regiments. Now if this body were to receive Income equal to the Medical Regimentally with a proportion of General Staff appointments the 54 Seniors on the list should receive on an average not less than as General and Field Officers Rs. 1,557 per mensem and now receive no more than 1092 or less than Supr. Military officers by Rs. 465 per mensem—*(See note D. after Table C.)*

18. Thirty years back superior emoluments in the common course of his professional career in India and higher salaries in the highest grade, were viewed as supplying the place of large pensions or Military retiring Income, composed in part of the Emoluments arising from the surplus of off reckoning of Regiments. Men made fortunes, and cared not for the amount of Retiring Pensions.

19. The means of realizing fortunes (as established in the instance of Chaplains long services in India) being cut off from the Medical Department; the Remunerating amount of Pension on retirement is all that is left for Surgeons to look to.

20. The monthly amount of Regimental Pay, and Staff and General Staff allowances taken from Mr. Mercado's (of the Presidency Pay Office) Tables is as follows,

A

A TABLE OF PAY, BATTA AND OTHER ALLOWANCES FOR REGIMENTS OF EACH ARM FOR ONE MONTH AND THE WHOLE YEAR.

Rank.	No. each.	Europn. & N. I. P. B. &c. Month.	Europn. & N. I. Total each rank.	Engrs. & Foot Artillery. B. B. &c.	Engrs. & Foot Artillery. Total Rs.	Horse Artillery. P. B. &c.	Horse Artillery. Total Rs.	Light Cavalry. B. B. &c.	Light Cavalry. Total.
Colonel.	1	(a)		1265	(6) 1,265	(z)			
Lieut. Col.	1	1,002	1,002	1002.4	1002	1157	1157	1157	1157
Major.	1	759	759	759·3	759	929.	929.6.4	929.6	929.6
Captain.	5	415	2,075	433.10	2,168	(d)4.588	2,332.1.	563	2,815
1st Lieut.	8	256.10	2,053	265.12	2,126	375	2,802.	365	2,922.
2d Lieut. & Ensign.	4	202	808	213	853.4	315.10	1,262.8	310.10	12,428
Total	20		6,697		Rs. 7,173.4		8,483		9,066
Staff Allces.					Staff ——				
Command	400			Regts.	500. 2500	Staff	8,483	Staff	9,066
Adjutant.	212			(c) 5.		Commd. Allce.	500	Commd.	400
Intr. Qr. Mr.	137			2.	400. 800	Adjt.	257	——	2,127
8 Cos at 50	400	....	1149			Intr. Qr. Mr.	207		137
				or Allces.	3,300	4 Troop.	1,500	6 Troop	1,320
Total P. B. & Allces.			7846	20×60=	1,200				
				16×50=	800	Total	St. Rs. 10,947	Monthly	11,135.
Yearly is St. Rs.			94152	5 Adjt. 257=	1285				
74 N. I. Regts.				2 do. 212	424	Yearly	Rs. 1,31,364	Yearly	1,33,620
2 Europ. 76				5 intr.qr.mr. 207	1035				
				2 do. 137	274				
				7 Regts.	8,318				
				P. B. & 7,173.4	50,212				
				7 Regts. mthly.	58,530				

Regiments.		Yearly Income each.	Total St. Rs.
76	N. I. & Europ.	94,152.	71,55,552
7	Foot Arty.	1,00,337	7,02,360
(x) 2	Engineers.	87,727.	1,75,446
3	Horse Arty.	1,31,364.	3,94,092
10	Lt. Cavy.	1,33,620.	13,36,200
			97,63,650

Total	Per Regt.	
98 Average Rs. 98,115 : 44 Total Regl. pay & Allces.	St. Rs.	97,63,650
Total Corps (Y)		2,20,000
336 General Staff		17,98,000
70 Pol. Civil Appointment (Y) 3,000 at 12,000 above Mily. P. & B. averaged at 4,000		2,80,000
98 Off Reckgs. at 7,200		7,05,600
(Y) Extra do. locals, &c. Allce.		
Grand total Rs.		127,67,250
Average per Regl. Rs.		1,29,580
Each Officer.....	Rs.	6,479

(A) All Colonels either on the General Staff of Army or retired Colonel Artillery are almost all in India and none on General Staff.

(D) 1 Capt. H. B. General Staff Appointment in each Brigade
(C) All European Corps Commander's allowances 500 per mensem
(X) Engineers No. Compy. or Command. Allowance, 1 Adjutant No. Qr.-Mr. each Regt. Engrs.
(Y) Not known to writer.
(Z) Only 1 Colonel in India—Brigadier Commanding Dum-Dum.

Medical..... 5927
Less by..... 652 per annum.

A TABLE OF MILITARY AND CIVIL PAY AND ALLOWANCES OF SURGEONS ON THE BENGAL ESTABLISHMENTS.

Number.	Surgeons.	Civil Salaries		Military pay, &ca.		Total each Officer.	Total each Class.	Yearly Amount.
		Salary.	Staff.	Pay &c.	Staff.			
3	Medical Board	500	1500	,,	2400	2900	8700	
6	Superintendg.Surgeon	,,	,,	465	1600	2065	12,390	
3	Ditto, ...	,,	,,	465	1266⅔	1731⅔	5255	
2	Garrison, ...	(a) ,,	,,	415	550	965	1930	
1	Governor General, ..	,,	1254	,,	1254	1254	1254	
1	Commander-in-Chief.	,,	,,	415	400	815	815	
1	General Hospital....	500	600	,,	,,	1100	1100	
1	Native ditto, ...	500	600	,,	,,	1100	1100	
1	Apothecary General	,,	1200	415	,,	1615	1615	
1	Secy. Mily. Board, ..	500	800	,,	,,	1300	1300	
9	Civil and Presidency,	500	4500	,,	,,	500	4500	
3	H. B. Artillery, ...	,,	,,	563	400	963	2889	
6	Light Cavalry.	,,	,,	563	300	863	5178	
6	Europn. & Foot Arty.	,,	,,	415	400	815	4890	
64	N. I. & Goolandauze,	,,	,,	415	300	715	45,760	
108	In India, ...	Rs.	10,454				98,676	
12	On Furlough,.....		12				12	
120	Surgeons,...	Rs.	1,25,448				11,86,112	
	Military, ...		10,60,664					
	Grand total, ...	Rs.	11,86,112					

B

A TABLE OF PAY AND ALLOWANCES OF 240 ASSISTANT SURGEONS.

Number.	Assistant Surgeon.	Regtl. Pay and Allowances		Staff Salary or Allowances.		Total of Both.
		P. B. &ca.	Total each class	Each	Amt. per class.	
12	Horse Artillery.	365.4	4383	,,	,,	4,383
4	Light Cavalry Regts.	365.4	1461	300	1200	2,661
8	Foot Artillery Regts.	250	2000	150x2	300	2,300
19	Regts. N. I., &ca,	250	4750	150	2850	7,600
7	Forts, Garrison, Stud, &ca.	250	1750	170	1190	2,940
64	Civil Stations.	312.8	20,000	104.8	6688	26,688
120		250	30,000	,,	,,	30,000
6	On Furlough.	,,				
						76,572
			234	Yearly is,..Rs.		9,18,864
			108	Surgeons, . ,,		11,86,112
			342	Total,..		21,04,976
		add at Furloughs,.....£				2,10,497.12.
		at £1925.12 Surgeons,.....				2,307
		at £91.26. 6 Assist. Surgns.				576.12
				Grand total £		2,13,381.4
Rs. 5927		Average 360 Medical Officers, £				592.14.3¼
360	Medical officers in India, yearly income,..... £					2,13,381.4
65	,, Retired officers pension in Europe, ...					15,786
				Grand total £		2,29,167.4
	Average of each income,..... £					539.4.2¾
	Average income each Military officer,..... £					613.6.10
	Medical less than Military income by,..... £					74.2.6¾

C

Aggregate Military allowances Bengal 98 Regiments (1960) Officers,.... ..... St. Rs. 127,67,250
Add amount Retiring pensions,.. £ 1,58,263
Less Off. Reckgs. £ 98 to 630,.. 62,370
Amount yearly pensions—Military Officers,..... £ 95,893 at $\frac{1}{3}$d. —— —— 10,95,920
Officers,.. 1960,, 138,63,170
Average each, ... St. Rs. 7,073
Medical Indian Allowances—as Table B,..... Rs. 21,33,812
65 Pensions England, £15,786 at $\frac{1}{3}$d 1,80,222
360 Officers average each,..... Rs. 6428
Less income yearly by,..... 645

D

Subscriptions 360 Medical Officers Bengal Establt. monthly, Rs. 33
Average each for 360 at 33 Rs. monthly,..... 11,880
Yearly amounts to, ... 1,42,500
To place them on a part with Military Officers in off-reckoning shares, or proportions 4 Classes (240) Assist. Surgeons.

Class					
1.....	84	×	16	=	1344
2.....	70	×	20	=	1400
3.....	50	×	28	=	1400
4.....	36	×	40	=	1400
					5584×Rs.

Yearly. 67,008

Class 112 Surgeons in India.					
1.....	48	×	50	=	2400
2.....	32	×	64	=	2048
3.....	20	×	80	=	1600
4.....	12	×	96	=	1152
			Rs.		7200 × 12 = 86,400

1,53,408
Less Furlough,..... 10,908
Income required,..... 1,42,500

The proportion being $\frac{9}{13}$ more than the Military subscriptions for an equal number of Officers to make compensation for off-reckoning advantages.
Thus whole amount Military pensions and in England off-reckonings (less Medical pensions) for 3 presidencies, ... £ 3,31,259
Less off-reckgs. 206 Regiments, ... £630= 1,29,780
Military pensions alone ..... £ 2,01,479
Proportion off-reckoning Pensions there are about 13 : 20 or off-reckoning subscription for Medical officers should be 65 per cent. above Military subscriptions for like numbers or 20×13=33 Rs. per mensem.

E

Old Medical Establishment 1807-8 Surgeons 70 Asst. Surgeons 140.

Medical Board 1st Member,.....	4500	=	54,000
,, ,, 2nd ditto, ...	3850	=	48,200
,, ,, 3rd ditto, ...	3500	=	42,000
			1,44,200

Superintending Surgeon.

3....1666.10.8,.....	5000	=	60,000
3....2060. 3,.....	6181	=	74,182

1	Secy. Medical Board,.....	1300	=	15,600	
2	Govr. Genl. and C.-in-Chief, ..	——	=	26,000	
1	Vaccination Supt. Genl.	1700	=	20,400	
1	Insane Calcutta,.....	1500	=	18,000	
12	Civil Surgeons, 500 each, ...	6000	=	72,000	
4	Garrison Depts. Genl. Hospl. ..	1000	=	48,000	4,78,382
30	Average Rs. 15s 946.1.$\frac{4}{5}$				
40	Mily. Regl. Surgeons, each 415			16,600×12=	1,99,200
60	Civil Asst. Surgeon at 312-8 ..			3,750, 60=	2,25,000
80	Military ditto, at 285×12=			3,220, 80=	2,57,600
					11,60,182

Staff Emoluments.

7	Apothecary, Marine, N. Hospital, &c. in Calcutta,.....	50,400
60	Jails, ... 104-8....1254, ...	75,240
	210 Personal Allowances,..... Rs.	12,85,822
	Medicine allowances.	
54	Regt. N. I. at 225, ... 12,150.....	1,45,800
8	Regt. N. Cavalry, 350 ==4200=	33,600
3,200	Arty. and European Regts. 32 Cos. 17$\frac{1}{4}$ pie per diem or 34 As. per annum, ...	1,08,800
400	Invalids 2-8.....	12,000
25	Provincial, &c. 200—5000×12=	60,000
	210 Medical Officers,.....	16,022
	Average Medical income,.....1807.....	7,810.9.0
	Ditto ditto,.....1830.....	5,982.12,1
	Difference,.....	1,827.12.11

NOTE F.

Addiscombe Cadets take rank of all those of the same season who were not educated at that Establishment. To take rank of others of the same age is a great advantage. The Addiscombe Cadet may thus be the first of 100 Cadets of the same season instead of the last 99 steps to a Cadet may be considered as a equal to 2 years longer standing or he attains the grade of Field Officer before the last perhaps by so many years (cæteries paribus). The Addiscombe Cadet obtains, then an advantage equal to 2 years by being educated in a particular manner for the service.

Ought not the Medical Officer, who has had a second Education requiring 6 or 7 years for its contemplation, to be entitled to equal advantages? or may not Medical Officers of 25 years' service be considered as having served 30 and thus be placed on a footing with Military Officers on retiring?

G

COMPARATIVE ABSTRACT.

No. 1.

Let (a) represent the relative average Indian income,

$$\text{Military } \frac{\text{Rs. } 613}{\text{Medical } 537} \text{ put} = \frac{61}{54}$$

$$\frac{\text{£ } 551}{242} \text{ put} = \frac{55}{25}$$

(b)= The relative amount Pensions. &c. 1833-4—

$$\text{(c)= Average relative number casualties in 100= } \frac{\text{medl. } 4{\cdot}7}{\text{mily. } 3{\cdot}7} \text{ put= } \frac{47}{37}$$

$$\text{(d). Comparative expence education } \frac{\text{medl. } 800}{\text{mily. } 300} \text{ put } \frac{80}{30}$$

$$\text{(y)= a×b×c×d. or equal to the result of the above, } = \frac{243}{142} = \text{Y.}$$

Then (y) $= \frac{243}{142} = \frac{171}{100}$ or Medical less than Military by 71 per ceut.

This last result may be treated as follows.

No. II.

put (·a) = first risk of life or difference medl. and mily. put at $\frac{22}{18}$

(·b) Capital $= \frac{1000}{300}$ put at $\frac{100}{30}$

and (·c) = 2d risk of life $= \frac{4{\cdot}7}{3{\cdot}7}$ put at $\frac{40}{30}$

$(z) = a{\cdot} \times b{\cdot} \times c{\cdot} = \frac{162}{78} : \frac{208}{100}$

or. 108 per cent. less advantage for Medical officer and

3rdly—This last result $\times \frac{551}{242}$

$= \frac{1,14,608}{24,200}$ Ultimate prospects of Medl. officer on an average would give,

$= \frac{473}{100}$ or 373 per cent. against Medical officer in the long run—

The sum of 34,000 Rs. to be paid to retiring of military officers after 35 years' service, would be more than covered by difference outlay Medical education in less time at 6 per cent. compound interest, if that difference were much smaller than is assumed.

Mr. Curnin's statement, that £100 paid down 25 years ago by a large number of mutual assurers would entitle survivors to an Annuity of £171 each, points to the conclusion that, a less than a superior outlay of £500 should guarantee an Annuity of £800 to retiring Medical officers of 25 years standing *over and above* their respective amounts pension.

Error { The Annuity could not exceed £140 for £100 paid 25 years ago but according to preceding Results—No. 2. × £307.3s.paid down 25 years ago ought to give £638—15.

× Cadet payment on entering the service to give pension of £339—14s.

THE FEVER HOSPITAL.—We have been obligingly favored with a printed copy of the *proceedings of the Governors of the Native Hospital relative to the establishment of a Fever Hospital for the relief of the Natives*, in some centrical part of the city. We have also been favored with some manuscript remarks on the subject by Dr. Vos the Police Surgeon. A Hindoo gentleman of intelligence and influence called upon us for the purpose of offering suggestions in regard to the situation and plan on which it is intended to erect this hospital. We may here mention, that he stated an insuperable objection to Sir J. P. Grant's proposition of placing the Mahommedan and Hindoo patients in the same hospital; which he considered would negative the admirable clause in Sir John's proposition of respecting the prejudices, religious feelings, and habits of the native population. He feared, that, unless patients professing religious opinions so diametrically opposed to each other could be placed in separate hospitals, the disposition of many Hindoo gentlemen, who were attached to the religion of their ancestors, to subscribe to such an excellent institution would be materially checked.

This gentleman has obligingly promised to favour us with his opinions as well as those of some of his countrymen on this important question. These, together with the other papers we possess on this interesting subject, as well as our own remarks, we regret, must be postponed for want of room until our next number. We may in the mean time state that the impression upon the minds of the Hindùs is that both the Hindù and Moosùlman patients, who are mutually prejudiced against one another, are to be placed under the same roof, to which the former have an insuperable objection, and we fear that, unless it be removed by having distinct buildings for these two classes, a great reluctance will be shewn in coming forward to subscribe to the proposed Hospital.

MEDICAL AND PHYSICAL SOCIETY.—The nature and object of this institution are not only to receive papers and to read them at the meetings held for that purpose, but every paper is considered a debatable subject. The discussions which have taken place within the walls of the Society have been conducted with considerable talent, animation, and eloquence; and information on clinical practice of great moment has frequently been elicited; but for want of a reporter of these discussions they have hitherto benefitted only the gentlemen who attend the meetings. We are not permitted, it is true, to take a reporter to them; but there is no law which prohibits a member of the institution from taking notes of the discussions and printing them. This we shall do for the benefit of our Mofussil brethren; for we never shall care for additional labour, however irksome, if we can only promote by our industry the cause of medical intelligence and science.

MEDICAL AND PHYSICAL SOCIETY'S MEETING.

Saturday, May 2, 1835.

Dr. N. Wallich, F. R. S. Vice President, in the chair. "A letter on the mood of operation of lithotomy by the native practitioners of Almora was read. This gentleman also appended to his communication the account of a case of preternatural labour successfully treated by turning. Dr. Cantor presented a preparation of the bones of the pelvis of a quadruped accompanied by a memoir and two drawings. In this preparation the hip joint had been luxated, the head of the femur forced through the upper portion of the foramen thyroideum so as to project a little into the cavity of the pelvis, and then fractured from the neck and body of the bone. In this situation it is firmly fixed by a copious deposition of callus. The acetabulum is almost filled with osseous deposit, and those portions of the ileum ischicum and pubes composing it are much thickened in structure. " and very freely perforated with foramina for the transmission of blood vessels. The upper or schiatic rim of the acetabulum is flattened, and bears marks of having formed a portion of artificial articulation. The ileum and sacrum on the affected side are firmly united by anchylosis."

A paper from W. Melligan, Esq., giving an account of the climate and diseases of the new Colony of Western Australia, especially of the Swan River district, was read. The following is an extract from it.

" The country is generally of the open forest description, the surface undulating, and covered with a great profusion of trees, shrubs and herbaceous plants. Three rivers intersect this valley,—the Swan, the Canning, and the Murray. They are subject to the influence of the tides, abound with fish, and though generally shallow, are subject to occasional inundations which leave extensive alluvial deposits. The Swan is navigable for boats of 4 or 5 tons as high up as Perth, which is about 12 miles from the sea coast. Fresh water lagoons are numerous; there are also others containing salt water. The water of the wells, though at first indifferent, from not having been procured from a sufficient depth, is excellent. It sparkles in the glass, cooks food and washes linen well and speedily, and may be drank freely without relaxing the stomach. The strongest winds are from the north west and south west. The northwind is the hottest and is very sultry during summer, destroying vegetation, if long continued. During the summer there is a regular land and sea breeze, the former prevailing in the morning from the east, and the latter setting in about noon from the south west. The mornings and evenings are pleasant, and the nights cool. The sky is clear, and of a beautiful azure, without cloud or rain.

Moderate dews descend at night. As the autumn approaches the weather becomes less serene. The sky is occasionally overcast with thunder storms, which prove acceptable however and beneficial, mitigating the excessive heat, and rendering the fields fit for the labours of the husbandman. In winter the winds are occasionally boisterous, endangering the shipping if exposed. It rains, for the most part, two or three days together, and then clears up for a somewhat longer period. In wet weather fogs are not uncommon in the mornings and evenings, in the low grounds, or along the banks of the rivers. Hail of a large size occasionally falls ; snow is unknown ; and ice is but rarely met with. Fires are not unwelcome in the mornings and evenings ; but, on the whole, are to be looked on, more as a luxury than a necessary. Such is the nature of the climate and locality in which Sir James Stirling proceeded in June 1829, accompanied by a detachment of H. M 's 634 Regt. to establish a New Colony. Settlers soon commenced to arrive, and poured in rapidly, till the end of 1830, at which time the population amounted to about two thousand. The vessels, which brought them out, resembled in some measure Noah's Ark, being crowded to excess with animals, birds, and plants as well as men, women, and children, with provisions and household goods. If we can fancy the population of one of the Parishes in England, mixed with a sprinkling of half-pay officers, some gentlemen for the East and West Indies, and a few cocknies, put down on the shores of a wilderness, we shall have some idea of the founders of this interesting colony. Their first object on landing was to get under shelter. Their Domiciles were, of course, at first of a wretched description. Some had single tents, others huts of green wood pervious to every shower, while many had no other covering night or day than the wide canopy of heaven. Afterwards when the settlers got on their own grants of land, their houses improved by successive gradations from the wooden house, they had imported, or had made in the colony, to that of wattle and dab, and finally to the more durable structure of brick or stone. As might be expected, losses from the straying of cattle in the bush, and disagreeable adventures from travellers losing their way, were far from uncommon ; accidents from explosions of gunpowder, and from the use of fire-arms, by persons unaccustomed to handle them, were likewise far from unfrequent ; in no instance, however, did any tentnie affection follow. Notwithstanding these little mishaps, matters continued to go on pleasantly enough till the beginning of the winter of 1830, when the supplies brought from England, consisting principally of salt meat, biscuit, and rum, began to fail ; the harvest was indifferent ; and to crown their misfortunes, after heavy rain the rivers rose from fifteen to twenty feet above their usual level, and all who had commenced buildings on the lower grounds, were obliged to desert them. From these various causes much personal fatigue and exposure were encountered, the hopes of the settlers were damped, and their energies depressed ; scurvy, fever, and dysentery consequently showed themselves. These diseases were principally confined to the lower orders ; among the higher classss, who were better provided with the necessaries and comforts of life, and who were more temperate in their habits, there was little sickness, and less mortality. With successive seasons the harvests became more bountiful, the flocks more numerous, and scurvy has appeared in consequence. The fevers have likewise become less prevalent, as the country has been more widely cleared and better drained. The endemic diseases of the country appear to be principally inflammatory affections of the mucous membranes. Ophthalmia, dysentery and catarrh ; rheumatism is occasionally met with in damp weather, in autumn and winter, of rather an obstinate description, and also a low fever.—the *gastro enterite.* Mr. Milligan's observations on these diseases have reference principally to the locality of Perth the capital of the colony. This town is situated on the banks of the Swan River on a gentle elevation, 30 feet above the level of the river, and about 40 above that of the sea. It is bounded to the south by the Swan, which is here $\frac{3}{4}$ of a mile broad, to the north by a string of fresh water lagoons, which runs up to the mountains, to the east by by an extensive plain terminated by the Darling Range, and to the west by Mount Eliza, which running north and south affords considerable protection from the strong gales coming in that direction. The Swan and the Canning unite immediately below the town in a large estuary, called Melville Water, which still further reduces the temperature of the sea breeze in its progress in land. The soil is light and sandy, with the exception of the banks of the river which are alluvial. The substratum is sand stone."

The foregoing paper did not elicit any discussion. The second paper read was a case of Tetanus by Mr. Roe.

"It occurred in a private of H. M.'s 38th Regt. of fair complexion and sanguine temperament, aged about 25. He was admitted into Hospital on the 25th of De-

cember, in consequence of a lacerated wound of the thumb and fingers of the left hand, occasioned by the bursting of a fowling piece which he had bought of a native. The wound became gangrenous and sloughing, and he is reported on the first of January, as having been troubled all night with spasms of his fingers and hand. These formidable symptoms continued to increase in spite of the treatment employed, and he died at noon, on the 3rd, after having suffered every torture which Tetanic patients do. On examination, five hours after death, the right foot and toes were found so much turned inwards from the ankle, by the spasmodic action of the muscles, that it appeared dislocated. On being placed in its natural position, it immediately resumed it unnatural distortion, and retained it, although five hours after death."

"The calvarium was strongly adherent to the dura mater, which was very vascular, and the medullary portion of the cerebrum and cerebrellum was soft and doughy. The membranes on the base of the brain were florid, red and very vascular. On laying open the whole length of the spine, the sheath was highly vascular, particulary at three points,—the 3rd cervical, the 2d dorsal and the 4th lumbar vertebræ. On laying open the sheath, and turning it back, the inside was pale and shining. The chord beautifully covered with florid red vessels along its whole course downwards, as if painted by art. The vessels anastomosed more thickly at some points than at others; viz. near the last cervical, and the middle of the dorsal vertebræ. The nervous substance appeared firm, and to resist the scalpel. There were some spots of vascularity over the stomach, which seemed continued from the lower portion of the œsophagus. This tube was particularly contracted, for two inches from the pharynx downwards, so that it scarcely measured the diameter of a large goose quill. As it united to the stomach, it spread out a little wider, and exhibited a slight inflammatory blush. The upper portion was rather pale and shining."

The spleen was very large, brittle and of a dark purple colour.

Mr. Corbyn expressed his surprise that no antiseptic had been applied to the wound when the disposition to sphacelus appeared. He added that in this country lock jaw generally supervened in a state of sphacelus in gun shot or sabre wounds.—Mr. Hutchinson did not think that tetanus was ever the consequence of sphacelus; he had never, during his experience, observed the effect from that cause.—Mr. Egerton took the same view with Mr. Hutchinson, and alluded to a case of a frost bitten extremity by way of illustration. Dr. Goodeve was of opinion that the cause of tetanus was the lacerated state of the nerves. Mr. Twining also said that he had never seen a case of tetanus supervene upon the appearance of sphacelus. In reply Mr. Corbyn stated that he drew his conclusions from experience, whether sphacelus was really the cause of lock jaw he did not pretend to assert, but he only stated a fact, that when sphacelus supervened in gun shot or sabre wounds, patients were frequently attacked by lock jaw. He added that on one occasion he was with a detachment which was making forced marches to reinforce some troops who were preparing to attack an outpost of the enemies, the detachment however did not come up until two days after the engagement: there were upwards of two hundred of the enemies found alive, most of them severely wounded, but the wounds of nearly all were in a state of sphacelus, and nearly all died with lock jaw.

We find that Baron Larrey's experience coincides with ours. In alluding to the commencement of tetanus under similar circumstances, he says "the suppuration of the wounds suddenly diminishes and at length totally ceases. The surface becomes puffy and dries up, it is at first red and aft erwards marbled." The Baron ascribes the cause of the change in the wounds and the superaddition of tetanus to moisture and sudden changes of temperature. He adds that the wounded men at the battle of the Pyramids who were attacked with tetanus were evidently the victims of the moisture and coldness of the nights. We beg to refer our readers to an able article by Dr. Dickens on Tetanus, (Med. Chir. Trans. vol. vii.) he states that six or seven cases came under the care of Navy Surgeons a few days after the action at New Orleans. The wounds were in an inflamed and painful state, but having been conveyed a great distance chiefly in open boats for want of proper care, no doubt, the wounds had become gangrenous. Dr. Dickens ascribes tetanus in these cases to the cold night air. Mr. Boyd, the Surgeon of the hospital, informed the Doctor of the case of an African who had lost his foot from sloughing from having been frost bitten; tetanus supervened immediately upon the very in-

active and torpid state of the parts. What however is more to the purpose are the remarks of Dr. Reid, in the *Edinburgh Medical and Surgical Journal for July* 1815, who states that on removing the dressings instead of healthy pus the surface of the wound was covered with a darkish unhealthy looking matter which he had in former instances noticed as the forerunner of tetanus. Sir Gilbert Blane alludes to a case of a wound in the thigh the patient had received in the attack on Stonington: the thigh was greatly lacerated and in a sloughing state; tetanus followed, and the patient died.

We have alluded to these facts in order to attract the attention of our readers to the important question whether tetanus frequently supervenes on the commencement of sphacelus in lacerated wounds. We shall be happy to receive communications on the subject.

To return to the discussion on Mr. Roe's paper: It was concluded by some observations by Mr. Twining on numerous cases of tetanus in native women which occurred four or five days after delivery. He ascribed the cause to excessive heat from charcoal fires in confined and crowded native huts. Dr. Stewart mentioned that he had treated a similar case that very day; and precisely under the same circumstances.

SELECTIONS.

LECTURES ON PHYSIOLOGY AND PATHOLOGY, OR THE INSTITUTES OF MEDICINE, DELIVERED BY DR. GRAVES, M. R. I. A.,

At the Meath Hospital or County of Dublin Infirmary Session 1834.—1835, *On Monday, 3rd November*, 1834.

INTRODUCTORY LECTURE.

Gentlemen,—The course of lectures it is my duty to deliver includes *physiology*, or the study of the structure, mechanism, and functions of the human body in health; *pathology*, which treats of the symptoms of diseases during life, and the morbid appearances detected after death; and *general therapeutics*, which refer to the general indications for the exhibition of remedies, and the best means of administering them.

This course, named the *Institutes or Theory of Medicine*, comprises within its limits the whole of what may be termed the scientific part of medicine and surgery, and includes the consideration of various subjects of the utmost importance, not only to the physician but the philosopher. Endowed with reason man alone seems capable of understanding to a certain degree the construction of his own body, the uses and functions of its various parts, and is the only animal that has attempted the problem of explaining himself. All animals are indeed placed within the influence of numerous agents capable of deranging their health, but man alone has considered the causes of disease, and sought to avert its fatal consequences by the suggestions of reflection and experience. Wonderfully and fearfully made, our bodies composed of matter, in itself inanimate, are governed, during health, by the laws of vitality, and each particle obeys an influence always different from, often opposed to, that which presides over the same particles when placed beyond the sphere of the living agency; yet so beautifully perfect is the structure of our bodies, that we are unconscious of the struggle, constantly maintained in every member and in every organ, between the conflicting laws of animate and inanimate matter. When life ceases the latter instantly resume their sway, and death is the commencement of a change, which soon destroys the shape and texture of each part, and dissolves the mortal mass into a few simple elements. To investigate the form and structure of the living body, to examine the functions of each organ, their mutual connexion, and their various uses in supporting this conflict between life and death, is the proper business of the physiologist. His attention must be directed not only to man, considered as a whole, but to each individual organ and its structure, traced to as great a degree of minuteness as can be accomplished with certainty. He must also endeavour to ascertain of what elementary principles these parts are ultimately composed; he must examine the mechanism of each organ, and accurately study its functions, not only in man but in other animals. Comparative anatomy* has indeed become indispensable to the physiologist, a name which no one

* Among the moderns, Haller and John Hunter, but particularly the latter, have the credit of first applying an extensive knowledge of comparative anatomy to the improvement of physiology. The immortal Harvey used it extensively in investigating the circulation,

can now claim who had not studied this accessory science, and that not superficially, but with perseverance and labour ; for general views of structure, striking analogy between organs, and instructive illustration of function do not become visible to the comparative anatomist, until painfully and tediously climbing he reaches an elevation whence the most distant objects, that lie scattered over the wide kingdom of nature, can be seen at one view, and he is thus enabled to compare the near with the remote, separate what had been previously classed together, and collect into the same group what before had appeared distinct.

Ardently engaged in studying the laws of those functions, by which life is carried on, begun, or continued from one generation to another, the physiologist seeks illustrations of his favourite pursuit, in every living object that presents itself to his observation. He travels nowhere without meeting something worthy of his attention, for it may be truly said, that most parts of this world are dwelling places of living creatures, and that we can scarcely find a spot uninhabited by beings endowed with life. We find it in the air, in the waters, in the eternal snows of the arctic regions, and burning sands of the torrid zone. We find it near the summits of the loftiest mountains, and in the deepest caverns ; even mephitic pools, poisonous soils, and boiling springs teem with animals and plants, adapted to the peculiar circumstances in which they are placed, and furnished with an organisation wisely contrived for their preservation. As this forms a subject well worthy of the consideration of every thinking mind, and furnishes abundant proofs, I had almost said, of the ubiquity of the Creator's animated works, I shall select a few examples in proof of the assertion just made.

In the warmer regions of the earth, where copious exhalations arise from rivers, swamps, and impenetrable forests, the insect inhabitants of the air swarm in such myriads, that they seem to the tortured traveller to fill the whole atmosphere, and at certain seasons of the year, their attacks become so troublesome and so incessant, that they force whole tribes of people to save themselves by a temporary migration.*

Even in the higher northern latitudes, the heat of the summer solstice calls to a shortlived existence swarms of mosquitoes, from which the Esquimaux, the Laplander and the Samoied are forced to protect themselves by keeping their huts constantly filled with smoke. How far the upper regions of the atmosphere may be peopled has not been ascertained, but it seems improbable that winged insects exist to any great distance above the highest flight of the swallow and swift, although wanderers from the plains are occasionally met with at considerable heights on mountains. Thus, in traversing the highest accessible regions of the Alps and Pyrenees, I have met with flights of butterflies, the emblems of summer and of sunshine, migrating from some neighbouring valley, and in their fluttering and devious course, almost touching with their fragile wings the hard surface of the glacier and never-melting snow, the types of cold and of winter *. De Luc, Ramond, Saussure, and Humboldt have all seen insects at heights equal to, or even exceeding, that of the summit of Mont Blanc. Of all animals the condor, or enormous vulture of the Andes, attains to the greatest elevation, for Humboldt saw it describing with expanded wings its aërial circles far above the highest peak of Chimborazo, where the barometer would have sunk below ten inches. The ocean seems to mark the boundary of that part of the atmosphere which is inhabited by winged insects, whose larvæ cannot find the necessary shelter and rest in its disturbed and unfathomable waters. But the depths of the ocean itself are not therefore untenanted ; the waters everywhere teem with life, both vegetable and animal. Between the tropics the mariner, leaning over the side of his vessel, watches with interest the motions of the various species which every where swim around, and sees with pleasure the flying fish glancing through the air, where it is forced by its numerous pursuers to seek a momentary refuge. In the West Indian seas, where the water is extremely clear, and its depth but small, he beholds on the bottom a thousand varieties of sea-worms, star-fish, snails, and muscles, besides fish in prodigious numbers, and, as he sails along the surface of the waters, he passes over whole groves of luxuriant fuci and other marine plants, together with immense masses of gorgonias, corallines, and alcyonias. He observes too with delight sponges, which, as large as shrubs, present the most beautiful play of colours to the eye, and, as they softly undulate with the motion of the waves, produce the pleasing

* Humboldt relates this fact.

* Ramond (*Voyages au Mont Perdu*, a work replete with original views and new facts) in climbing a very dangerous precipice, arrived at a spot where both advance and retreat seemed impossible. In this painful and hazardous situation the appearance of a fly awakened a curious reflection. "Durant cette inaction qui devenait d'autant plus penible qu'elle se prolongeait advantage, la mouche apiforme vint se poser auprès de moi et nettoyer ses petites ailes dont nous êtions rêduits à envier la puissance !"

illusion of his traversing fields covered with a profusion of flowers.

In other regions, notwithstanding the rapid course of his ship through the water, the navigator day after day beholds the ocean all around thickly covered with luxuriant seaweeds, which, floating on the surface loose and unattached, grow without roots, and, to the inexperienced, convey the idea of rocks and shallows, dangers still far distant*.

Were we to seek an illustration of infinity in point of number, we would find it in those shoals of cods, herrings, pilchards, or sprats, whose moving and almost solid masses occupy many leagues. Even in the colder regions, and within the Arctic circle, the bosom of the ocean is scarcely less prolific of life. In some places, indeed, Captain Scoresby observed its waters tinged brown, as by a species of minute animalcula, which seeking light and heat near the surface, formed a living stratum not more than a few feet in thickness, but which covered a vast extent of the sea near the coasts of Greenland. Captain Parry, while engaged in his bold attempt to reach the North Pole, observed that the little pools formed by the action of the sun on the surface of the snow and ice were full of animalcules.

On the coast of Greenland and other Arctic countries, the snow which covers mountains and valleys, and whose surface scarcely yields to the influence of the solar rays at midsummer, is in some places reddened† for miles together by a minute species of alga, which grows in vast quantity in the substance of the snow.

The infinity of animal life is exemplified in the most striking manner by a consideration of the *Infusoria*, an accurate and satisfactory account of which the student will find in a little work, illustrated by plates, lately published by Mr. Prichard, called the Natural History of Animalcules.

"The bare knowledge that there are myriads of atoms existing in a single drop of water, recreating and executing all their functions and evolutions with as much rapidity and apparent facility as if the range afforded to them was as boundless as the ocean, must carry with it an intensity of interest to the mind of every human being; of every one, at least, who is at all accustomed to meditate on the perfection of nature, and to recognise and adore the hand which guides her through all the vast variety of her stupendous operations." * * * "Until Dr. Ehrenberg adopted the expedient of introducing vegetable colouring matter into the fluid which supplies them with food, an experiment attended with the most successful results, these creatures were commonly supposed to be entirely devoid of internal organization, and to be nourished by the simple process of cuticular absorption. By the application of coloured substances, which, moreover, have been found to invigorate rather than to depress the animalcule, and to maintain it in the full exercise of all its functions, this erroneous notion is set at rest, and an internal structure has been discerned in some, equal to, if not surpassing many of the larger invertebrated animals, and comprising a muscular, a nervous, and, in all probability, a vascular system, all wonderfully contrived for the performance of their respective offices."

He who has attentively watched the motions of these living atoms in a single drop of water, as displayed by the oxy-hydrogen microscope, must feel impressed with the conviction that their motions are voluntary, and that like their fellow-animalcule—man, their lives exhibit a mingled scene of pain and enjoyment. Their extreme minuteness as judged of by our feeble senses, does not prevent them from having a multiplicity of organs for their use, probably as perfect as in much larger animals. In the *Vorticella rotatoria*, or common wheel animalcule, which varies in size from one-thirtieth to one-four hundredth part of an inch, nerves and nervous ganglions, organs, of mastication, deglutition and digestion, sexual organs, *and a pair of eyes* have been distinctly seen and described, besides a very complicated apparatus, by means of which its peculiar rotatory motions are performed. Baker relates the following curious observation concerning a minute hair-like animalcule discovered in prodigious numbers

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* The immense tract of sea, covered by floating fuci, has been spoken of by many authors, and especially by Humboldt, *Relation Historique du Voyage*.

† The redness of this snow, depending upon the presence of a minute alga, Protococcus nivalis, must be carefully distinguished from the red colour which Captain Parry observed on certain occasions, where the feet of his men or the bottoms of the sledges left impressions on the snow. This phenomenon was probably caused by a certain degree of transparency, which the surface snow possessed in consequence of having been previously melted, and which allowed the transmission of the red rays alone through the parts forming the edges of the footsteps and sledge-tracks. The great obliquity of the sun's rays in so high a latitude favoured the production of this effect. No adequate explanation is given in the published account of Captain Parry's attempt to reach the North Pole over the ice. A most interesting paper, written by Count Xavier de Maistre, on the Colour of the Atmosphere and deep Water, suggested this explanation. Vide Jameson's New Philosophical Journal, July, 1833.

in a ditch near Norwich. "A large cohering cluster of them was put into a jar of water, when one part went down to the bottom, whilst the other continued floating on the top. All things remained for some time in this condition, until at last each swarm of animulcules grew weary of its situation, and had a mind to change its quarters. Both armies, in short, began their march at the same time against the side of the jar, and as one proceeded upwards and the other downwards, after some hours they were nearly meeting about the midway. The desire to know in what manner they would behave on this occasion engaged the observer to watch them with a careful eye; and, as they approached still nearer, he beheld, to his great surprise, the army that was marching upwards open to the right and to the left, and leave a convenient space for the army which was marching downwards to pass between its wings. Thus, without confusion or intermixture, each held on its way, the army which was going upwards marching it in two columns to the top, and the other proceeding in great regularity and order in one column to the bottom. This amusing spectacle serves to show that, however mean or contemptible these creatures may appear to us, the Almighty Power that created them has not left them destitute of sagacity to associate together, and act unanimously for the benefit of the community, both these armies marching as regularly as if under the direction of wise leaders."

In Africa, particularly in the neighbourhood of the Egyptian pyramids, the heat is so intense, and the sand appears so parched and burned, that it seems impossible for either plant or animal to find sustenance, and yet Hasselquist found both here, viz.—the Chondrilla juncea, a small species of lizard, and lion ants innumerable. Scheuchzer and Pallas both observed plants and animals in sulphureous springs. Forskal, in Arabia, Barrow, at the Cape of Good Hope, and Hooker, in Iceland, found different species of conferva and ulva growing in boiling springs. The most remarkable account of vegetation at a very high temperature is mentioned in Staunton's account of Lord Macartney's embassy to China. They found, at the Island of Amsterdam, a spring, the mud of which, hotter than boiling water, gave birth to a species of marchantia. The Turbo thermalis, a shell fish indigenous in the Adriatic is found also in the thermal springs of Abano, at a temperature of 120°.

Soils abounding in metallic impregnations are generally found to be very unfavourable to the development of vegetable life; and among these the refuse of lead mines is one of the most remarkable for its sterlity, a quality which makes it an extremely valuable subtitute for gravel in making walks through fields and gardens, as has been done by my friend, the Rev. Dr. MacDonnell, at Dalkey; and yet, even in this soil, which is so peculiarly poisonous to most plants, the Arenaria verna grows with luxuriance. Sir Joseph Banks made an attempt to raise it in his garden; but before he could succeed, he was obliged to send to the mines for a quantity of its native lead rubbish, which, having been put into a pit made for that purpose, soon became covered with this plant, although every effort to make it thrive in other soils, not adulterated by this metallic impregnation, had proved utterly unsuccessful. Covered with the Arenaria verna this patch appeared as fertile as any other part of the garden; but had not the seeds of this plant been procurable, that soil would have remined incurably barren and unproductive of any other known plant. Some soils, however, are composed of materials which the most long-continued exposure to atmosphere influences seems unable to prepare for the sustenance of vegetable life. In 1828, I had an opportunity of observing a striking illustration of this fact in Auvergne, "where several of the conical mountains produced by volcanic eruptions of a date prior to the Christian era, have their sides still naked and destitute of the slightest trace of vegetation. The interior of their broken craters rugged, black, scorified, as well as the rocky floods of lava with which they have loaded the plains, have a freshness of aspect, such as the products of fire alone could have preserved so long, and offer a striking picture of the operations of this element in all its most terrible energy; and indeed some of the streams of lava near Chamont are as fresh in their aspect as those which have flowed in Italy within the memory of man."—*Quarterly Review*, No. 72, p. 456.

In addition it may be stated that I observed others of these extinct volcanoes covered with a thick sod of luxuriant herbage even to the very bottom of the craters. It not unfrequently happens, that of two volcanic cones, touching each other at their bases, the one is perfectly bare and destitute of vegetation, while the other affords a sweet and abundant pasturage. This phenomenon struck me very forcibly, and indicates a chemical difference in the ejected matters worthy of further investigation.

Nothing can be more singular than the unaccountable manner in which plants spring up on certain occasions. Thus after the great fire of London in 1666, the whole surface of the devasted city was in a short time covered with a luxuriant crop of the *Sisym-*

brium irio, in such profusion, that it was calculated the whole of the rest of Europe did not contain so many specimens of this plant.

Again, wherever a salt spring breaks out at a distance from the sea, its vicinity immediately abounds with salt plants, although none grew there before. When lakes are drained, a new kind of vegetation springs up. Thus when the Danish island of Zealand was drained, Vilny observed *Carex cyperoides* springing up, although that species is naturally not a native of Denmark, but a native of the north of Germany.

M'Kenzie, in his north American tour, speaking of the country bordering on Slave Lake, says, "it is covered with large trees of spruce, pine and white birch; when these are destroyed poplars succeed though none were before to be seen." Evelyn notices a fact very similar to this, which he observed in England, in Nova Scotia, and the United States of America, where fires have destroyed the original wood the new saplings which spring up are generally different species of trees.

But life is not limited to the surface of the earth. Thousands of worms, snails, slugs, and the larvæ of many insects, form a subteraneous population which live for the most part concealed from observation, but come forth at stated intervals in quest of food. Even caverns which had no previous communication with the open air, have been found when opened to contain, living vegetable matter. Thus Humboldt saw in a cave just opened at Mugzendorf, the beautiful stalacties covered with Lichen tophicola.

But the physiologist is not contented with merely considering the present population of the kingdom of life; the eye of rational curiosity turning retrospectively on the past, discovers a scene still more astonishing, and if possible, more instructive; for we find that the living beings which have existed within the historical era, are as nothing compared with the countless millions which age after age had tenanted the world, long before man appeared on its surface.

"Measuring time as man does, in the minute manner suited to his wants and conveniences, a few thousand revolutions of the earth in its orbit appear to him to comprise a period so considerable, that he feels it difficult to conceive that great lapse of time which geology teaches us has been necessary to produce the present condition of the earth's surface, *and which, when we even take some great astronomical period as an unit, we still find it impossible to express**."

* De la Beche's Geological Researches, p. 297.

Let us then for a moment turn from the *present* to the *past*, from what *is*, to what *has been*, from the *living* to the *dead*, and we shall find the remains of living beings still more universally disseminated, and with a providence most worthy of admiration, even the *relics* of death converted into habitations for life, and contributing materially to enrich the scenery, and increase the fertility and extent of the dry land. When we reflect how many islands, and mountains, and what a large portion of continents is formed of secondary limestone, in many cases almost entirely composed of organic remains, we must yield to animals of ages long gone by the merit of forming vast tracts of country, eminent for the fertility of its soil, and the utility of its rocks both in agriculture and the arts.

When we behold coral reefs and islands raised from the depths of the ocean, through the agency of successive generations of animalcules, whose hordes, united by some common impulse, all contributed to rear after a fixed plan the mighty structure, which, firmly rooted in the deep, defies the raging of the elements, affording shelter and an habitation to various animals, we must—to beings so small and so simply organised that they occupy the lowest rank of animal existence, to such beings must we concede the merit of structures, compared with which the most magnificent piles raised by human labour shrink into insignificance.

When we consider that, at the bottom of vast lakes, the *cases* or *deserted shells*, in which dwelt the larva of a minute species of insect called *Indusia tubulata* (the *caddis-worm* of fishermen), accumulated in process of time in such immense quantities as, on a subsequent revolution of the earth, to supply solid strata, supporting not only extensive plains, but constituting the sides of deep valleys, and the tabular summits of lofty mountains†, we must admit that these apparently insignificant creatures have left behind them a memorial of their existence, which, far more permanent than the boasted monuments of man, has resisted the dilapidating hand of time, and, although torn and convulsed, has not been annihilated by the impetuosity of the flood, or the shock of the earthquake.

By giving birth to new strata, while they overwhelmed and dislocated the old, volcanoes have left indelible and awful marks of a power at once destructive and creative, nor has the action of water been less energetic in modifying the surface of our globe, as is proved by the number and extent of formations and strata produced

† See Scrope's Geology of Central France.

by an accumulation of marine depositions, but now elevated to the height of eight or ten thousand feet above the present level of the sea. Such convulsions, by resuscitating fires long slumbering in the bowels of the earth, or by calling forth the mighty deluge of waters, have wrought indeed great and wonderful effects, but have scarcely produced more extensive alterations on the surface of our planet, than have been effected by the slower but unceasing agency of living beings. The philosopher who reflects on these things is inspired not merely with wonder, but with awe, seeing that, in traversing the earth, the very rocks which support his footsteps are the tombs of myriads once alive, and finding with amazement the globe we inhabit encrusted, as it were, with a vast cemetery, the records of whose dead are still extant, and may be deciphered by a patient study of the characters inscribed on the strata that contain them.

Had each successive change in the phyical state of the earth, its atmosphere, and its waters, been affected tranquilly, then had the corresponding alterations thereby produced in its plants and animals been indelibly recorded in the strata of each period, and the study of geology would have disclosed the history of by-gone ages arranged in exact chronological order. Such has not been the fate of our planet. Its era of change has not been always one of quiet transition. The force which upheaved, deep from beneath the superincumbent strata, the granitic summits of the Alps, has scattered the fragments of their burst and broken masses over the plains of France, Lombardy, and Suabia, in the centre of which their colossal pinnacles themselves proclaim the resistless energy that wrought the catastrophe, where, overtopping the confused heaps of surrounding mountain ruins, they stand like shattered pillars, attesting at once the powers of the Architect and of the Destroyer.

Although portions of the surface of the globe have from time to time undergone violent revolutions, still age after age of quiescence must have been necessary for the formation of those massive and extensive depositions, consisting almost entirely of organic remains, that occur in the secondary limestone and in the contiguous strata so widely diffused over Great Britain and the Continent. In the examination of these remains, the labours of the naturalist, combined with those of the physiologist, have attained results the most brilliant and instructive, and have enabled us to ascertain that the greater portion of Europe lay once beneath the surface of a shallow sea of estuaries or of lakes, whose expanse, abounding in islands and surrounded by low and marshy lands, covered with a vegetation more than tropical, we are enabled to repeople with swarms of huge amphibious monsters, belonging to species and genera now extinct, but which, then enjoying the fresh existence of a new creation, disported in the still tepid waters, or basked in the sun's red rays. transmitted with difficulty through an atmosphere loaded with carbonic acid and warm aqueous vapour, and therefore totally unfitted for the respiration of man, his fellow mammalia, or of birds, but still sufficiently pure to be adapted for the support of invertebrated animals, fish, and reptiles. The physiologist, in studying the remains of this era, recognises the wisest adaptation of animals to the circumstances in which they were placed, and dwells with admiration on a world teeming with life at a time that the calcareous precipitate formed in the water tended gradually to purify the air, and render it capable of supporting creatures of a higher order, while it enveloped the remains of those then in existence in such a manner as to preserve them perfect from our inspection. The vast beds then forming under water, were in after ages to be elevated, and become fertile tracts of country, fitted for the reception of man, for whose use the dry land of that era was not unproductive, nor was the vegetation, then so luxuriant, destined to disappear and decay unused. The tree-ferns and lofty palms, that waved in the damp and warm wind where the highest levels of the still submerged Europe protruded above the surface of the waters, the luxuriant growth of those giant equiseta and reeds, which fringed the lakes, and afforded a lurking place to enormous ichthyosauros, and to the fierce tribe of crocodiles and alligators, whose few surviving species, a comparatively scanty and feeble remnant, now infest the waters of the Nile, the Ganges, and the Orinoko ; the numberless varieties of mosses, charæ, and other aquatic plants, which clothed the marshes and stagnant waters with their verdure ; those primæval forests, whose depths were tangled by various species of climbers, which twined with rapid growth among trees whose stems they embraced in their gigantic coils ; all these various species of vegetation continued unchecked for ages, and seemed doomed to moulder and decay unprofitably for man, then uncreated.

But behold, a change has come over the scene, and all those accumulated stores of vegetable matter have disappeared without being destroyed, for now, deep beneath the surface of the earth, they lie compress-

ed and carbonised, forming immense* strata of coals, in which they are preserved, as by a miracle, from further change, so that thousands of years afterwards, when raised by the industrious hands of civilised man, the stony mass burns with a flame as bright, and a heat more intense, than can be obtained from the combustion of recent wood.

Had time permitted, it was in my intention, gentlemen, to have spoken of the great advantages which comparative anatomy has conferred on physiology; at present however I find that I must limit myself to a single illustration of the great additional interest with which we view our physiological inquiries, when we find that the inferences drawn from the study of the human body and its functions may be often extended to other animals, and even to plants; a circumstance calculated to excite the physiologist to persevere in his observations and experiments, in the hopes of throwing light not only on the structure and vital actions of man, but of the whole tribe of animated beings. Thus when we examine the function of respiration in man, we become aware of certain changes produced in the air which has been breathed, and we observe that one of the constituents of the air has disappeared, while its place is occupied by another gas. The part thus used in respiration, we soon discover to be actually necessary for the support of that function, for when it is exhausted, or much diminished in quantity, the air is vitiated and life soon ceases.

Now what an additional interest this single and insulated fact receives, when further observations have extended it into a law equally applicable to the respiration of all animals and plants. What a stimulus to exertion must the reflection prove, that our discoveries are not limited to man alone, but extend throughout the whole animal and vegetable kingdom. Inspired with fresh zeal, the physiologist now examines the respiratory organs in birds, fishes, insects, and plants, and every where observes the same effects produced by organs the most different, but in all cases displaying a wonderful adaptation to the general structure of the being and the peculiar nature of the medium in which it lives.

He finds the bird respiring with ease during its rapid flight through the air. He finds the fish breathing under water, and the worm under ground. When he walks abroad in the fields, he finds that the breath of life issues from every leaf of each tree and plant that adorn the scene; he becomes conscious that every living thing derives its vital principle from a common source, and, feeling a sympathy with all around, he refers with gratitude to the First Great Cause, whose laws govern the whole kingdom of animated nature, and he returns to his chamber a wiser and a better man.

The physiologist, from considering the structure and functions of the different orders of animals, at last arrives at a variety of species, which in many respects approximate to plants, and subsist without heart, brain, or nerves. On the other hand, the botanist observes many plants which, endowed with a degree of locomotion and sensibility to stimuli, seem to approach the limits of the animal kingdom. The investigations of the chemist confirm this analogy, and displaying the animal and vegetable kingdoms still more closely joined together, supplies another link of the chain which unites the various ranks of living beings. But chemistry does not stop here, for from this science issues a light still more brilliant, revealing to us, in the most striking manner, the simplicity of the means employed by the Creator in the construction of the earth and all it contains; for we find that the very principles, used in the formation of animate, constitute also the base of inanimate matter, and consequently the infinite variety of animals and plants, which throng with life, air, earth and water, together with the solid basis of the earth itself, its plants, its mountains, and its seas, are all composed of ultimate principles, so few in number, that specimens of all might be easily contained together within a nutshell. Nor can the physiologist confine his admiration of the Deity to the display of his power on this earth, although manifested on a scale so stupendous. No, his imagination, nay, his reason, will carry him still farther, even into the utmost verge of space; for when he reflects what an influence gravity, light, heat, and electricity exert upon living beings, and how intimately the two latter appear to be combined with the very existence of the principle, when he finds that very system in the universe is subject to the laws of gravity, when he observes that, though gifted with a speed almost exceeding that of the imagination, even light, itself cannot escape into a region where it may wander disobedient to the laws impressed on it at the commencement of its flight, when he finds heat and electricity every where borne on its wings, when he reflects on all these things, he can scarcely

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* What an accumulation of vegetable matter it required to form the coal fields of England, is attested by the fact, that at the present enormous rate of consumption the coal will not be exhausted before thirteen hundred years.—Vide *Malthebrun's Geography*.

avoid inferring the *ubiquity of life**.—*Lon. Med. and Surg. Jour. Dec.* 6, 1834.

IMPERFORATE ANUS SUCCESSFULLY TREATED.

To the Editor of the Medical Gazette.

Sir,—Should you deem the accompanying case of imperforate anus of sufficient interest to occupy a column of your journal, I shall be obliged by its insertion at your convenience. I am, sir,

Your obedt. servt.

ROBERT DYCE, M. D.

Assistant Staff-Surgeon.

Maidstone Barracks, Nov. 3, 1834.

On the 5th of October last, I delivered a woman of a female child; the first of seven children born alive. The labour was natural. The following day a dose of castor-oil was given to the infant, which, not operating, was repeated at 3 P.M. the same afternoon. At my evening visit I found there had been neither water nor motion passed, which led me to examine the anus. I found its form externally was tolerably perfect,—however with rather a more ragged appearance than usual; but on introducing a bougie, it was stopped in its progress about an inch and a half from the external aperture. My finger, when beyond the sphincter, conveyed the sensation as of entering a vacant space, into which projected a small tumour. After some consideration, I introduced the canula of a trocar up to what appeared to be the impediment, and pushed the stilette on to its utmost extent; but no meconium followed. A medical friend of mine, who was kind enough to visit the child along with me, tried the same means, as also the introduction of a grooved needle, but with no better success. Our efforts also to hit upon the urethra were equally unsuccessful. It was then determined to wait the result of a greater distention of the gut, as no urgent symptoms had as yet shewn themselves. On Tuesday (second day) the child was reported to have had an uneasy night, to have vomited repeatedly, and latterly to have refused the breast. The abdomen was very tense and swollen, and the labia enlarged and livid. Nothing had passed either from the rectum or bladder. Another attempt was then made: I introduced my finger into the anus; the impediment was felt more distinct and prominent; a pharyngotomos was then passed flatly along the finger as far as the obstruction, and the lancet pushed firmly on. In a few seconds I had the satisfaction of seeing the meconium pass freely by the finger. A very slight hæmorrhage followed. A hot-water injection was thrown up, which brought off a considerable quantity of hardened meconium, with evident relief to the child.

Still no water had been passed; and every attempt, on this as on the former occasions, to find the urethra by a probe, was unsuccessful. A warm-bath was directed, and fomentations to the abdomen to be repeatedly used. A few hours after, the child was said to have had three blood motions, to have had no vomiting, and there was rather less tension of abdomen. At this time our attempts were renewed to open the natural passage to the urethra and bladder, and we were deliberating what had better be done in case of failure, when happily, on using some force by pressure with the probe, the resistance was overcome, and urine flowed freely. A dose of oil was now given, and the fomentations directed to be continued.

Wednesday (third day).—The abdomen was found still tense, though less so, and with some œdema of the lower part. The labia were less swelled and livid. The child had been easy, sucked well, and had three or four motions, less bloody and more feculent, but no water. A probe was again introduced, and easily entered the urethra. At this time a tea-cupful of high coloured urine came off. For eight days from this period, the occasional use of castor-oil was all that was required; conceiving that free action of the bowels would keep the orifice in the rectum open, and obviate the necessity of using bougies. In this I was mistaken. The wound was evidently at this time contracting; the stools were thin, and in small quantity; a good sized bougie was therefore introduced twice a day for ten days, when, both functions, being performed regularly, I desisted. The child has now, I consider, been well for the last week.

A similar case to this has been mentioned to me, as occurring in the practice of a civil practitioner within the last few days, where the trocar was also unsuccessfully used.

If a single instance in my own hands, and the report of a second case in those of another, would justify my hazarding an opinion, I would say, that, of the two instruments, the trocar and pharyngotomos, the latter is decidedly the preferable. From the elasticity and little resistance offered by the gut, and the trocar not having so keen an edge, it will be more likely, instead of entering, to push the gut before it, as must have happened to myself; whereas the pharyngotomos will penetrate freely, like a lancet, and has, besides, the advantage of enabling

* For a very interesting recital of all the instances hitherto ascertained concerning animals and plants living in a medium possessing very high temperatures, I must refer the reader to Dr. Hodgkin's and Dr. Fisher's translation of Edward's celebrated work on the Influence of Physical Agents on Life.—Appendix, p. 465.

the operator to enlarge the wound by a crucial incision, by simply turning the flat surface of the instrument from off the finger, and introducing it at right angles.—*Lon. Med. Gaz. Nov.*, 1834.

FOREIGN MEDICINE.

Remarkable Monstrosity.

M. Angelo Bossini relates the following case in the *Annali Universali di Medicina.*

During the night of the 15th February, 1834, he was called to attend a woman of the name of Francesco, 43 years of age, the mother of several healthy and well-formed children. She had been many hours in labour, and the midwife in attendance considered the case to be difficult. He found two feet already protruded, one of which, according to the midwife, came down immediately after the rupture of the membranes, the other she had brought down. M. Bossini then sought for the arms, and having ascertained the situation of the umbilical cord, he brought one, as he thought, to the vulva, when he found it was another foot. He, of course, considered now that he had to do with a twin case, but soon discovered that this third limb belonged to the same trunk as the two preceding. By carrying his manœuvres a little further, he found the fourth limb, which he brought down, and the hips were then tangible, when he ascertained that the four lower extremities with a portion of two trunks were united into one at the umbilicus. The narrator of the case then gave the body the motion of semi-rotation, by which he was enabled to reach the arms, and bring them down. By pursuing the manœuvres of rotation, and depression, the monster was born. It presented two heads, two necks, uniting into one large thorax, with two arms, one of which appeared to belong to each fœtus. There were two spinal columns, two scapulæ, two ani, and two sets of the genital apparatus (female). There was only one placenta. This extraordinary production died during the progress of labour. The right fœtus was more developed than the left, but they both appeared to be of full growth.

Re-union of the Nose, after its Complete Separation.

BY DR. FRANCISCO M. CARLIZZI, OF NAPLES.

On the 5th of November, 1832, a woman of the town named Carmela Napoletano, 21 years of age, having quarrelled with a man of the name of Gennaro Marotta, the latter seized the girl's nose between his teeth, and bit off a large portion, comprising the two alæ, the lobe, and the septum, as far as the ossa nasi, and then threw it in the mud. Napoletano ran in this condition to the police office of the quarter Montecalvario, where the wound was dressed. Three hours afterwards Dr. Carlizzi went to the police office, and, having heard the history just narrated, requested the commissary, Signor Portaluppi, to have the nose sought for. In about two hours and a half it was brought him, crushed and covered with filth. In spite of these unfavourable circumstances, Dr. Carlizzi removed the dressings, washed the nose in boiling water, and proper bandages. The seventh day the dressings were removed, when it was found that complete union had taken place, but the left ala was rather deformed, inasmuch as it had been crushed between the teeth of Marrotta Thirty-seven days after the injury cicatrisation was perfect, but the nose presented a monstrous appearance from the redness of the cicatrix, and the lividity of the mutilated part. To remove this extraordinary appearance, a weak solution of the nitrate of silver was applied, and when the eschar had separated, the nose appeared uniform, and many medical men doubted the fact of the accident having happened,—*Osservator Medico.—London Medical and Surgical Journal, Nov.* 1834.

MEMOIR ON THE LYMPHATICS OF THE SKIN, OF THE SEROUS MEMBRANES, AND OF THE NERVOUS AND MUSCULAR TISSUE.—BY V. FOHMANN,

Professor at the University at Liege.

This author has placed himself in the first rank among the anatomists, by his work on the communication of the lymphatics with the veins, in 1821; his beautiful anatomy of the lymphatics of fishes, in 1825; his work on the lymphatics of the placenta, and umbilical cord, in 1832, and which forms the first part of the present series. Mr. Fohmann far outstrips his rival, Mascagni, not only in ascertaining the disposal of the lymphatic trunks, but in his search after the distribution of these vessels in the very tissue of organs; which, as Mascagni observes, is the most important point to be sought after.

The ultimate distribution of lymphatics is admitted to vary in each organ; the same observation is to be made on the blood-vessels. M. Fohmann shews that the lymphatics do not arise for the most part by free radicals, but by anastomosing plexuses, deprived of valves, and which are finer and nearer to each other, the closer they are placed to the free surface of the tegumentary, serous, and mucous membranes. There cannot, then, be open orifices at the extremities of vessels; these organic orifices, if they did exist, could only be found in the coats of the vessels.

The first plate of the work represents the lymphatics of the integuments of the

chest; the second, those of the scrotum, the skin of the penis, and glans; third, those of the mucous membrane of the œsophagus and stomach; fourth, the lymphatics of the mucous membrane of the ileum; fifth, those of the mucous membrane of the colon; sixth, lymphatics of the mucous membrane of the tongue, larynx, trachea, and bronchi; seventh, those of the urinary bladder and urethra; in the eighth are represented the lymphatics of the serous covering of the heart; in the ninth, those of the pleura covering the diaphragm, and those which form (*gaines*) meshes around the fibres of this muscle; in the tenth plate are represented the lymphatics of the arachnoid and pia mater: those plates are all very carefully engraved.

This work is additionally useful to anatomists, as it gives the manipulations of those materials by which M. Fohmann has been enabled to make his preparations; and we may be assured of the accuracy of the plates from this circumstance, that M. Lauth has succeeded, by following his directions, in injecting several parts which have afterwards exactly corresponded with the delineations of M. Fohmann.—*Dublin Journal.*

APPOINTMENTS.

Naval.—Mr. James Lawrnece, surgeon, and Mr. R. T. C. Scott, assistant-surgeon to the Pique. Mr. H. Goldney, surgeon, and Mr. W. Pattison, surgeon to the Rover. Mr. John Bowler and Mr. R. R. Arnott, assistant-surgeons to the Victory. Mr. A. Johnstone, assistant-surgeon of the Melville, to be surgeon of the Hyacinth, v. Pattison, deceased Mr. J. E. Goodridge, assistant-surgeon to the Water Witch. Mr. Hopley, assistant-surgeon to the Actæon.

Military.—Assist. Surgeon Hume, of the 84th Foot, to be surgeon of the 43rd Foot, in place of Galeani, appointed to the 28th Foot. Dr. P. Russell, assistant-surgeon 76th Foot, in place of Ferguson, appointed to the 1st West India Rangers, Dr. Alex. Black, assistant-surgeon 84th Foot, in place of Hume, appointed to the 43rd. Assistant-Surgeon Dr. Ferguson, from the 76th Foot, to be surgeon of the 1st West India Rangers, in place of Savory, gone on half-pay. Dr. Henry Handley and Dr. Henry Drummond have been appointed assist-surgeons to the forces, in place of Hutton and Dameruin, deceased. Mr. W. Wilton, surgeon of the South Gloucester Militia, in place of Shrapnell, deceased.

General.—Dr. Sheill, physician, and Mr. Malone, apothecary, to the New Lunatic Asylum, Clonmel. Mr. Baker, of Leeds, medical superintendant of factories in Mr. Rickard's district. Dr. James Dunlop, of Baker-Street, assistant-physician, and Mr. E. Cutler, of Sacville-street, assistant-surg. to St. George's Hospital. Dr. Field, physician, and Mr. Walter Jones, surgeon to the Worcester Dispensary.—*Lon. Med. and Surg. Jour. Dec.* 1834.

MISCELLANEOUS INTELLIGENCE.

Liberty of the Press in India.—Conducting as we do a journal of science, we cannot restrain the expression of our admiration of the sentiments expressed by Sir Charles Metcalfe in his reply to the address of the inhabitants of Calcutta on the subject of a Free Press. These sentiments, emanating as they do from the ruler of this great empire, tend to enlarge the field of science through all Asia, unshackle the mind, and in the place of thraldom, superstition, and darkness, plant the standard of reason, knowledge, and truth. Our journal is the herald of the progress of medical science in the East to most of the institutions and journals of that science in Europe, and as such can it be more worthily employed than in conveying to those distant countries, sentiments like those contained in the following remarks of Sir Charles in answer to the enemies of a free Press in India?

"*If their arguments be that the spread of knowledge may eventually be fatal to our rule in India, I close with them on that point, and maintain that whatever may be the consequence, it is our duty to communicate the benefits of knowledge. If India could only be preserved as a part of the British Empire by keeping its inhabitants in a state of ignorance our domination would be a curse to the country and ought to cease.*"

Every parent in India, we trust, will so impress these sentiments on his children as never to be obliterated from their hearts. Let the rising generation be taught to look with respect and admiration upon him whose mind, raised far above the influence of fear or of praise, marks out a course for its future conduct.

"*Whatever*" says the Governor General, "*be the will of Almighty Providence respecting the future Government of India it is clearly our duty as long as the charge be confided to our hands, to execute the trust to the best of our ability for the good of the people.*"

Military Fund.—As most of our readers are married men and subscribers to the Military Fund, we feel it our duty to announce that a proposition is in circulation from the Directors of the Fund, the object of which

is to abrogate virtually one of its fundamental rules by admitting as a subscriber to the fund, a gentleman who is not attached to either branch of the H. C. Service. We beg to observe that if once the fundmental rules of either the Widow's or Orphan Funds are thus abrogated, in our opinion, Subscribers possess no guarantee for the stability of these funds or security for their propeity. The following is the first and fundamental rule of the fund.

SECTION I.

Art I.—The following description of persons, AND THEY ALONE, are eligible to be Subscribers to the Bengal Military Fund.

1st. Officers or Cadets in the Military Service of the Hon'ble Company under the Presidency of Fort William.

2d. Chaplains of the Bengal Establishment.

3d. Officers of the Bengal Medical Establishment.

4th. Officers of the Bengal Establishment on the retired List.

We hear that Mr. Superintending Surgeon Venor returns to England during the ensuing cold season.

We have been informed on good authority that it is Dr. James Watson's intention to retire, and that he proceeds to reside and practise at the Cape of Good Hope. It is also rumoured that Surgeon J. Evans will not return to India.

The memorial on the subject of the recent reductions of Superintending Surgeoncies, and other serious grievances of the Medical Department, signed by Dr. Mellis and backed by the Surgeons at the Presidency, has been sent in to the Govt. to be forwarded to the Court of Directors.

ORDERS RELATING TO THE MEDICAL SERVICE.

APPOINTMENTS.

20*th May.*—Mr. Asst. Surg. G. Temple is appointed Superintendent of the Baugundee Salt Chokeys, and Ex-officio Principal Assistant to the Salt Agent of the 24-Purgunnahs, in the Jessore Division, to take effect from the 6th instant.

16*th May.*—Assist. Surg. M. Richardson, M. D., to Officiate, until further Orders, as Civil Surgeon at Delhi, vice Doctor Graham.

8*th June.*—Acting Assist. Apoth. J. Healy is appointed an Assistant to the Hon'ble Company's Dispensary, vice Butler promoted to the rank of Apothecary.

1*st June.*—Assist. Surg. C. Griffiths to the Medical charge of the Civil Station of Sylhet.

Madras, 19*th May.*—Assist. Surgeon W. Gilchrist to the Medical charge of the Farm in Mysore, vice Assist. Surgeon Lawrence who, at his own request, is replaced at the disposal of His Excellency the commander in Chief.

BENGAL PROMOTION RANK IS ASSIGNED.

Medical Department.—Assist. Surg. T. C. Hunter 24th July, 1834.

Assist. Surg. R. C. M'Connochie, 3d September, 1834.

Assist. Surg. J. W. Knight, 5th October, 1834.

Assist. Surg. J. S. Sutherland, 16th November 1834.

Assist. Surg. R. N. Burnard to be Surgeon, from the 28th May 1835, vice Surg. J. Coulter deceased.

LEAVE OF ABSENCE.

Assist. Surg. C. Finch, M. D., 13th N. I. from 25th May to 25th Nov. to visit the Hills North of Deyrah, on private affairs.

26*th May.*—Mr. G. N. Cheek, Assistant Surgeon, attached to the Civil Station of Burdwan, for six months, on private affairs, from the 15th proximo.

Dr. J. Esdaile, Civil Assistant Surgeon at Azimgurh, on Medical Certificate, for two months, from the 16th instant.

Assistant Surgeon W. B. Webster, Hill Rangers, from 15th June to 31st August to visit Calcutta on urgent private affairs.

Madras.—Assistant Surgeon J. Hamlyn, 36th Regiment N. I. from 1st to 30th June 1835, to the Presidency, preparatory to applying for leave to proceed to Calcutta on sick certificate.

BENGAL REMOVAL AND POSTINGS.

22*nd May.*—Surg. J. Coulter is removed from the 3d Brigade of Horse Arty. to the 42d N. I. at Delhi.

Surg. J. Graham, M. D., is removed from the 42d N. I. to the 3d Brigade Horse Arty.

26*th May.*—Apothecary J. Butler, lately promoted, on being relieved from this employment in the H. C. Dispensary, will do duty under the directions of the Acting Super. Surg. at the Presidency, until further orders.

Asst. Apoth. M. R. Crawford, lately promoted, is directed to do duty in the General Hospital.

Assist. Surg. J. Innes, M. D., attached to the Civil Station of Bhaugulpore, is appointed to the Medical charge of the Corps of Hill Rangers, during the absence, on leave, of Assist. Surg. W. B. Webster.

Assist. Surg. T. Leckie, now doing duty with the Artillery at Dum-Dum, is posted to the 4th Battalion.

EXTRACTS FROM LETTERS.

Letter No. 7, dated 14th June.—The undermentioned Officers, belonging to your Establishment, have been respectively granted an extension of leave for the period of six months :

Surg. J. Evans, Surgeon J. Watson, and Assistant Surgeon Thomas Forrest.

THE INDIA
JOURNAL OF MEDICAL SCIENCE.

VOL. II.] AUGUST 1, 1835. [No. XX.

ORIGINAL COMMUNICATIONS.

MR. BRAMLEY'S INAUGURAL LECTURE.

Delivered to the Students of the Medical College, June 1, 1835.

(*Concluded.*)

But before he quitted this subject, he would look to the metropolis of British India. To Calcutta itself. To whom do the majority of natives of rank and wealth, and intelligence in the present day, resort in times of severe sickness? To Europeans. And why, it may be asked, do these entrust their lives to the care of foreigners, whose very touch or even presence is apt to be considered a contamination? Not because the trusted physician is of European birth or extraction. Not because of preference to strangers over their own countrymen. But because the European is known to have received an education that vouches his fitness for his vocation. Because he has been sedulously taught his art on scientific principles. In short, simply because the knowledge he has acquired is well understood and believed to be built on a solid and sure foundation. But was this state of things right? and natural? Should the moral condition of the natives subject them to this infringement on their hereditary or religious privileges? Certainly not. You, observed the lecturer, are the persons to whom the eyes of your own countrymen will be directed hereafter, as substitutes for European skill. It is you, who ought to supersede the foreigners, or enter into honorable rivalry with them. And, placing as I do the firmest reliance on your determination to prosecute your studies with zeal and perseverance, it is you who will ultimately supersede them.

Can it be credited that Egypt, which seven years ago possessed no kind of medical institution whatever, now boasts of a well organized Medical Government, essentially superior in many respects to that of a nation which vaunts of its multitude of charteredcor porations, professedly devoted to the cultivation of medical science? The latter remark, he was sorry to say, was in allusion to the public Hospitals and Medical Colleges of England. But he would see to what intent the tree of knowledge had been replanted in a country where it had perished ages since. What has sprung up in uncivilized Egypt? Why? an organized Medical School, embracing four distinct sections, which he proceeded to enumerate.

He hoped his pupils would not be led away with the idea that the science of medicine was to be learned by attending lectures. It was not by their daily attendance in that room, in mere compliance with the customary routine of study, that would avail, unless their attention was exclusively devoted to the subject before them. Lectures, like books, were only auxilliaries to the practical study of disease: but the medical sciences rested chiefly on observation, and were only to be acquired by resorting to Nature.

A course of lectures should contain a general, but not minute exposition of the science, a discussion of the principal doctrines, a methodical arrangement of the subject, and such a collection of knowledge from various quarters as was calculated to exhibit the present state of the art, and so arranged as to suit the capacities and minds of the pupils. But the rest which was necessary they should know, and which was by far the most essential part, must be supplied through the active exercise of their own industry and energy.

It was not then lectures or writings that would qualify them as medical practioners. Nor indeed was it a knowledge of Anatomy and Physiology alone, which could teach them that of disease. The question then is, how were they to be taught this? by studying the book of Nature. Lectures and books, though they may be useful, are but of secondary importance in comparison with the observation of disease. It was of course necessary, in the first instance, to acquire some knowledge of Anatomy and Physiology, which were the great ground-works of Medical Science, before they could turn their observation of disease to a profitable account. No mechanic would think of repairing a watch or a clock, who was not well versed in all its parts, its movements, and its connections: the same with respect to the human body, no person was able to cure its different diseases without this being acquainted with the structure of the whole. But hav-

ing gained this knowledge, his pupils would be able to judge of the distinctions between health and disease—and it was then that much would depend on their observation, for they must see, watch, and examine the sick patients for themselves. A large hospital, then, they would soon discover, was the best school of medicine, and *clinical* instruction, under the guidance of a competent teacher, was the best and surest mode of learning. The facts, thus presented to the senses, make a much stronger impression than any description. The immediate appeal to Nature, which the presence of the sick patient affords, and the close attention of intelligent students, supply at once a salutary excitement to the preceptor and pupil. A few cases attentively observed would teach them more than any lectures or books. For if they attended to Nature with an unprejudiced eye, they could not go astray. To secure these advantages to their full extent, he was happy in being able to inform them, that the arrangements made by Government, for the practical instruction of the pupils of that college, were ample. Besides the valuable sources which would hereafter become available, as the European General Hospital, the Native Hospital and its dependent Dispensaries, the Eye Infirmary, all of which were under the superintendence of the most experienced men in this country, a Hospital, containing a large average number of patients, was to be established on the premises adjoining the medical college. This would prove a valuable acquisition, as, independent of its affording ample means of practical instruction, the pupils during the early part of their studies would be saved the time and trouble of seeking the same information from a distance, while their attendance would be conducted on all occasions in the presence of their instructors.

With reference to the plan of instruction and the regulations by which this would be guided, so much would depend on circumstances which were likely to arise as they would proceed, and which at that time could not be reckoned on, that he had thought it advisable to defer drawing up a prospectus until sufficient progress had been made in his arrangements, to admit of his plans being regulated by a fixed code. On their doing so, depended, in a great measure, the preservation of that regularity of attendance, and good moral general conduct which he would ever hope strictly to maintain within those walls.

Their attendance would not be required for more than 1½ hour each day for the present; and he should endeavour to keep to this limit probably for the first twelve months, that is, as regards what would be considered public instruction, in order that they might have as much time as possible to devote to a continuation of their general studies. He would exhort all of them, who had the opportunity of improving themselves in general knowledge, whether at school or at their own homes, to make the best use of the intervening time, for the greater store of general information they acquired, the better would they be prepared to meet, and receive with profit, the numberless difficulties they would have to contend with, in seeking to gain an adequate knowledge of Medical Science ere they would be qualified as practitioners. Furthermore this opportunity of improving their general education was perhaps the last they would have, because by and bye the necessity would arise to oblige them to devote their exclusive time to Medical Science, that is, if they were ambitious of becoming efficient practitioners.

He would conclude that day's discourse, then, by assuring them with all possible sincerity that his associate Dr. Goodeve, and himself partook out of the common spirit by which every teacher should be actuated, viz. that in urging men on to study with zeal, perseverance, and assiduity, their best efforts would be directed to the improvement of those who commit their education to their charge. For they felt that the success of that institution, which was so fully calculated to aid the course of useful information amongst the natives of this country, would mainly depend on the friendly relation, which he hoped to establish and support, between the teacher and pupil. Thus by mutual aid, and by a common interest, he might hope to contract that friendly intercourse, which might prove a lasting source of gratification and advantage to them both.

It was very probable there would be many points in his lectures, both in regard to language and the details of the science, which he might have failed to describe with sufficient clearness to meet their understanding. If these should occur, or rather he should have said when these occur, he trusted they would not reconcile themselves to continue in uncertainty about them. He advised them on all occasions to reject, without ceremony, any delicacy which would prevent them, applying to Dr. Goodeve or himself for further explanation. So far from his being averse to these inquiries, he would receive them as a gratifying proof of their zealous attachment to their profession, and of their determination to understand it.

Lastly, he would impress on their minds the serious nature of the studies they were about to enter upon, and to exhort them to employ most diligently the short, he would almost say, too short period of time, that they would have to devote to the purpose

of rendering them able to take upon themselves the active duties of their profession. They might believe him, when he said that the study of medicine was a most arduous undertaking. He did not wish to discourage them when he told them that it would occupy persons of great mind and shining talents many years to master it, and bring up their knowledge to the present state of the Science. It was, however, a salutary and pleasing exercise of the mind, while the practice of the profession called forth all the better feelings of their nature. In some respects they enjoy peculiar advantages: they were employed in the study and contemplation of nature, and the investigation of truth. They were not called upon to defend doctrines or systems, nor to uphold any particular set of opinions. They had no interests at variance with those of the community at large. In professional intercourse with their fellow creatures they were known only as the instruments of good—as the means of restoring or securing health, the greatest of blessings—of alleviating or removing pain and sickness, the greatest of evils, and to soothe the acute anguish which relations and friends feel for each other. Not only the happiness or the misery of life, but the very question of life and death often depended on their judgement and exertions.

Observe, said the lecturer, the responsibility, belonging to those decisions, on which it would depend, whether a beloved husband or wife should be saved; whether children should be restored to their anxious parents, or parents be preserved for the benefit of their offspring. He trusted, that bearing in mind the serious nature of these duties, they would eagerly embrace every opportunity of gaining that knowledge which would qualify them for discharging them effectively.

They would thus become respected members of an honorable profession, and they would prepare for themselves in the decline of life the sweetest of all rewards, the retrospect of labours, devoted to the good of others.

CASE OF GLOSSITIS.

We beg particularly to call the attention of our readers to T. C's. opinion on the powerful effect of iodine and its various preparations in combating many diseases. We agree with T. C. that before the discovery of this remedy many glandular and strumous swellings were considered beyond the power of the therapeutic art.

To the Editor of the India Journal of Medical Science.

Sir,—In former Nos. of your Journal are detailed, cases of *Glossitis*, in which the usual antiphlogistic treatment were had recourse to with success. The following case being somewhat different as to symptoms and treatment may probably induce you to give it a place in your columns. It may be termed *Chronic Glossitis*. The subject of it was an old Musulmán writer, who stated that the enlargement was of six months' standing, had been gradually increasing, now protrudes beyond his lips, and totally obstructs the passage of solid food—in other respects he enjoys tolerable health. His disease commencing during his recovery from a severe attack of remittent fever, unaccompanied with decided pain, occasional slight lancinating twitches in the organ being the only symptoms, which arrested and directed his attention to a close examination of the part. The swelling presents a red shining appearance and a soft elastic feel, as if it contained air, uniform throughout. Fever subsided without medical treatment. It occurred to me, to scarify the part, as the usual mode of treatment adopted in similar cases, but the patient strongly objecting, I was satisfied with the application of four leeches, which bled freely, but without affording any relief. I then had recourse to blisters external to the swelling, and applied three successively, without the least perceptible advantage. Mercury or Iodine now semed to me to offer the only prospect of success that remained, I therefore, with a hope that has seldom been disappointed, determined on applying iodine in the form of an ointment on the surface abraded by the blisters, in the proportion of ʒss. of iodine to ℥ss. of Resin ointment, small portions to be rubbed in three times daily—in the course of ten days, decided amendment became visible, the tongue reduced to nearly its natural size, deglutition and respiration performed with perfect ease.

In many points of view the case is, I think, not undeserving of notice, being an interesting and novel terminat ion of the previous fever, and a beautiful exemplification of the variety of modes which Nature adopts, to expel from the system that morbific principle upon which diseases, fevers in particular, are, by many, supposed to depend.

It furnishes also another proof, if any now-a-days be necessary, of the powerful, and I may add, specific effect of this medicine and its various preparations, in combating many diseases, which, before its discovery, were considered beyond the power of the therapeutic art. We possess, in this

medicine, an agent, which exhibits over the absorbent system in particular, an utmost unlimited controul; and I believe there are few complaints in which it has not been tried, and in general with more or less success and under judicious management, never with decidedly injurious effects.

Being partial to its administration, I use it with advantage in all glandular strumous swellings. dismennorhea, and goitre, and as yet never have had reason to regret its employment. For internal exhibition, I consider the hydriodate of potass the most eligible, either in the liquid or solid state, being equally powerful with the other forms, and less liable to induce inconveniences, which do sometimes follow the continued exhibition of iodine.

That distressing consequences sometimes arise from its abuse, I should be *sorry* to deny. This circumstance of itself being a proof of its activity, as a remedial agent, being in fact its most powerful recommendation, and not inferior in that respect to mercury and the preparations of it.

These remarks may be considered needless digressions, "vox et præterea nil," but I am induced to make them, because of the growing feeling among many of the profession to underrate the value of iodine amply shown in our scientific journals, by clinical details of its malignant effects in some instances—and I know from experience, that a feeling, anything but favorable to its employment, is daily gaining ground among those whom we are called upon in our professional capacity to attend—verbum sat.

Unqualified or exaggerated praise is as imperious as unsparing censure, and both tend equally to bring the most important discoveries into contempt—we should therefore, when we discuss the merits of a question medical or moral, take care that a good cause may not suffer from injudicious employment of either the one or the other.

I am, Sir, yours obedtly.

Mofussil, April 4, 1835. T. C.

CASE OF ABSCESS IN THE HEART OF THE HORSE.

The following is an interesting case of abscess in the heart of a horse. Money describes a case of a large abscess situated in the muscular substance of the left ventricle of the human heart; but this had been the effect of acute inflammation, and the symptoms of agonizing pain were present in the pericardial region, together with dyspnœa, concentration of heat over the site of the organ, jactation, &c. The writer alluded to also narrates a case in which small cists were attached to the pericardium, containing limpid fluid of a faint straw colour and another of tumour situated in the auricles. The remarkable circumstance in Mr. Parry's case was the existence of the disease some time prior to its having occasioned death. Thus serious disease of the most vital organs may be making its insidious ravages without affecting the health of the general system. Mr. Parry would have added to the value of this important communication had he furnished a drawing of the heart.

We trust Mr. Parry's good example will induce other of his brethren in the veterinary art to come forward with communications on the diseases and morbid anatomy of the horse. The Professors of veterinary surgery have had among them men distinguished for scientific acquirements. We could advert to other names than those of Moorcroft and Marsden to vouch for the accuracy of this assertion.

To the Editor of the India Journal of Medical Science.

Sir,—On first starting your journal, I think you invited, amongst others, communications on veterinary subjects. Should the following case of Abscess in the Heart of the Horse be deemed worthy of insertion, may I beg you will give it a place, as a circumstance I believe of very rare occurrence.

A brown colt, three years old, was admitted into Hospital of the Central Stud, about a month ago, for a bad sore on the top of the coronet. His general appearance and condition were extremely good; he fed well, and there was nothing to denote the least constitutional derangement. The sore had put on a healthy appearance and was rapidly healing. On the morning of the 4th instant about 7 A. M. a report was made to me, that a colt had been taken suddenly ill, was shaking a good deal, and walking about the loose box with his head hanging down. I immediately drove to the Hospital, and found the trembling of the fore extremities, &c. as described, had in a great measure ceased—the colt seemed a little agitated, and his general manner was strangely uncommon and unfamiliar to me. —I ordered the attendants away, and remained myself in the veranda of the Hospital to watch him. He placed himself in a *corner* of the stable, with his nose nearly touching the bedding—there was a vacant

dull heavy appearance about the eyes (the conjunctivæ of which were natural)—the lips were partially relaxed and hanging loosely; the ears were thrown backwards and forwards unusually quick, and the twitchings of the Panniculus Carnosus, pectoral and masseter muscles, were every now and then distinctly observable; the legs and ears were warm; there was no fever, nor unusual heat in the mouth. I continued to watch him for nearly half an hour, when the dull vacant stare, and the hanging of the head left him, and whilst the medicines were preparing, he noticed and neighed two or three times, at another colt, which was running about the paddock, and made also a *slight* attempt to leave his own place. There was evidently an obvious change for the better, I ordered an enema to be administered, and the following to be given, three drams Aloes, half a dram of Emetic Tartar, and five grains of Calomel.

At 12 A. M. all unfavorable symptoms had left him, and he was anxious for food, but only bran and water were allowed. In the evening he drank three or four quarts of thick bran tea, and picked from the hand a small quantity of *doob* grass for a minute or so, and then turned away from it. This I attributed to the sickening effect of the medicine, a *common result*, and I accordingly left him, with a favorable impression that he was doing well.

On the 5th—this morning, the medicine has acted slightly on the bowels, the colt is lively; looking out of the loose box, and takes notice of others running about in the paddock, neighs, and is anxious for food. No unfavorable symptoms, one dr. Aloes, half dr. Emetic Tartar repeated. He has drank two or three quarts of bran tea, and is allowed a little fresh grass, which he eats with appetite. At 12 o'clock A. M. the colt is reported to me "*quite well*," and at 4 o'clock P. M. immediately after drinking some bran tea, he was seized exactly in the same manner as yesterday, the symptoms were great trembling of the fore extremities, muscular twitchings of the body, shoulders, and jaws, dull vacant appearance about the eyes, he walked several times round the loose stall, threw himself convulsively back, and instantly died.

On opening the animal a few hours after death, the viscera of the abdomen were found in a perfectly healthy state, also those of the chest at first sight, but, on slitting up the pericardium, which did not contain more than the usual quantity of serum, an unusual appearance on the outer surface of the right ventricle of the heart presented itself. There was a large vascular space of a circular form, the centre of which had a fatty yellowish appearance, was hard, and had a firm cartilageous feel. On attempting to make an incision into this part of it, a considerable resistance was offered to the knife, exactly as if I was cutting through cartilage. On penetrating nearly an inch in depth, a stream of dirty fœtid matter flowed out with some force, which was found to proceed from a regular circumscribed abscess, capable of containing about an ounce of pus, in the substance of the wall of the ventricle. At its deepest part, it projected in the form of a pouch into the cavity of the ventricle itself. This pouch, as well as the whole of the interior of the abscess, was of a greenish gangrenous appearance, and through the apex of the former there passed from the abscess into the ventricle a minute but distinct passage barely sufficient to admit the head of a small probe. Across the cavity of the ventricle towards the apex was observed a firm round band of coagulable lymph, of an inch in length. The coronary vessels appeared larger and firmer than natural. No other trace of disease could be found in the left ventricle. The brain was in a perfectly regular state.

But, how is the sudden death to be accounted for? I think there can be little doubt of the long previous existence of the disease, as was apparent from the completely changed and degenerated structure of the surrounding parts. The only conjecture, I could hazard, is, that on the day the animal was taken ill, with the symptoms described, the passage alluded to had been completed into the cavity of the ventricle, and through that a few drops of the fetid pus made its way, and by getting thus into the general circulation produced thro' the medium of the brain, the symptoms noted in the beginning of this paper.

Your opinion, or that of any of your speculative correspondents on so interesting a subject, would be most acceptable.

There is another remarkable point, the high state of health and condition the colt was in, previous to, and at the time of his death, strange that an organ of such vital importance should so long labour under so serious a disease without its functions or those of the system generally being affected in the least degree. Cases of abscess in the heart in man are, I believe, perhaps not very common; but it will be found that the disease always showed obvious symptoms of one kind or another.

Central Street,
May 7th 1835.

I remain, Sir,
Yours faithfully,
ROB. B. PARRY.
Veterinary Surgeon.

POISONOUS FISH.

Clupes Theyssa	*Yellow billed Sprat*
Perca Venenata	*Rock fish*
Murena Majoe	*Congee Eel*

Those of our readers who are fond of eating fish *roe* for breakfast will consider Dr. Campbell's communication of some importance; it brings to our recollection the time when *Hilsâh* fish was considered to be the cause of cholera.

To the Editor of the India Journal of Medical Science.

Sir,—In the number of the Journal of the Asiatic Society for January 1835, Dr. Macleland has described a new species of river fish found in the mountain streams of Kumaon. The same animal, so far as I am capable of judging from Dr. M's. account, and the frequent sight of the fish, is very common, throughout the mountain streams in the neighbourhood of the valley of Nipal, and is I believe a favourite article of food among all classes of the population, within reach of its localities. I cannot at present produce a specimen of the creature for the purpose of comparison with the drawing in the No. of the Journal alluded to, but that is not material, as my object is only to bring to notice the peculiar effects on the human body produced by eating the impregnated roe of a fish very common throughout a mountain, named ' Ussla" by the Nipalese, " Trout" by the Englishmen of the Presidency, and I think identical with Dr. Macleland's animal. During the months of September and October this creature is found in considerable abundance, and at this season the roe appears to be at its fullest growth. The fish is not at any time high flavored, and is so abundantly supplied with bones that few persons are tempted to eat it, who may have any other to partake of. The roe, however, when well dressed, is tolerably palatable, and, for once, most persons would indulge in it, but few can be induced to venture on the dainty a second time. The symptoms of poisoning from this fish, for the most part, appear an hour or two after eating, at least so it is related of the violent and fatal cases of this nature so frequently met with among the West India Islands, and on the sea coasts. The peculiar effects of the Nipal Trout do not become so soon apparent, and altho' they are never fatal, still their violence and long continuance are sufficiently distressing. Two cases of the nature alluded to have occurred at the Presidency, one of which came under my own observation, and may suffice to indicate the ordinary course of the affection. It is as follows: one or five hours after eating the tainted roe, the individual has a sense of great weight at the stomach and a desire to vomit. Shortly afterwards vomiting commences, and is most violent, the person retching as in Cholera, and during the intervals the nausea is extreme; griping accompanies the disorder of the stomach, and is soon followed by purging, not very violent, but long continued and painful.

In one case the symptoms continued from 12 at night until the following evening at bed time, during which interval, the person was unable to eat or drink, and could scarce leave the horizontal position without bringing on a fit of vomiting. For two or three days afterwards there is a tendency to nausea, but no other bad effects follow. This announcement may be a useful warning to persons travelling in the hills during the spawning season of this Trout. The natives do not seem to be aware of this property of the roe, perhaps they reject it, at the season of its deleterious taint, or perhaps from use or stronger stomachs, the power of the roe is unable to upset their more vigorous digestion. The class and order of this fish I know nothing of, but perhaps persons conversant in this branch of natural history may identify our " Ussla" with the poisonous fishes of Europe or other countries. There is a list, at the heading of this letter, of some of these deleterious animals, at all events they are injurious at certain seasons of the year, and in this respect resemble the " Ussla" which during the cold and hot season is eaten with perfect impunity.

Nipal. A. CAMPBELL, *M. D.*

REVIEW.

TRANSACTIONS OF THE MEDICAL AND PHYSICAL SOCIETY OF CALCUTTA, VOL. VII. PART II. PP. 497, THACKER AND CO. CALCUTTA.

ARTICLE III.

Case of Beri Beri, with Pathological Remarks. By J. MOUAT, M. D.

A Practical Essay on the History and Treatment of Beri Beri. By Assistant Surgeon JOHN GRANT MALCOLMSON *Madras Medical Establishment, Madras: Printed, by order of Government, Oct.* 1835. *pp.* 343.

As the article and the work now before us treat of a disease very little known in Europe, and not extensively in many parts of India,

we shall proceed to give, by way of a few preliminary observations, a brief account of its rise and progress from documents which do not appear in the writings of Mouat and Malcolmson. We may also mention that our own experience in the disease is extensive, having seen its ravages among Lascars on the sea, where it broke out in three large ships belonging to the Fleet in which we came to India. In consequence of the prevalence of this disease, which occasioned most alarming devastation on board the Mornington, the Arian, the Exeter, and several other ships, Mr. Hunter the marine surgeon of Calcutta was called upon by the Government to examine into the cause of such unusual mortality: the singularity of the disease, together with its rapid and fatal progress, arrested his attention, and he resolved to lose no opportunity of collecting the fullest information on the subject; the result of which he published in a work in 1804, entitled *An Essay on the Diseases, incident to Indian Seamen or Lascars on long voyages.* The great scarcity of the work is to be regretted; for it contains matter of very great importance. Albertini* adduces instances of Epidemical dropsy which in symptoms and rapid progress resemble the disease of Beri Beri. Sauvages describes, under the name of Anasarca Americana, a similar disease incident to the Negro Slaves in the West Indies. Dr. Dick and Dr Christie have also written upon the occurrence of diseases in their practice essentially the same. Bontius has described the disease under the terms *Barbiers* and Beriberii. He says, the inhabitants of the East Indies are much afflicted with a troublesome disorder which they call the bereberii (a word signifying a sheep). The disease has probably received this denomination on account of those, he says, who are seized with it, having a tottering of the knees and a peculiar manner of walking, which exhibit to the fancy the gait of that animal. The disease is a species of palsy or rather a tremor; for at the same time that it impairs the sensation of the feet and hands, sometimes even of the whole body, it induces a trembling. Dr. Lind says that "Barbiers" is a species of Palsy and that its attacks are sudden. Mr. Marshall says that Bœ or Beri in the Singalese language means "unable" or "unwilling." Natives confined to their beds often use the following expressions in a tone of great agony: "Mata bœ" or "Mata beri." To render the word more intensive it is sometimes repeated as "bœ bœ" "beri beri." Riberio, a captain in the Portuguese army serving in Ceylon when the Dutch invaded the coasts of the island, has described the disease under the name bere bere. Mr. Marshall says, that in 1820 he observed among the troops an unusual number of cases of Anasarca which had occurred at Kandy, and as some of them were severe, they ought to have been returned under the head 'Beri Beri'. The prominent symptoms were an anasarcous swelling, and for the most part a slight degree of numbness of the inferior extremities, the strength much impaired, the swelling rose to the belly, in some cases tumefaction extended over the body, accompanied with oppressed breathing; in others the power of locomotion greatly impaired: in some cases it resembled that of a person attempting to walk on his heels; the pulse was weak and irregular. One case is given which was fatal in a few hours. Dissection shewed the skin and muscular parts almost colourless, four ounces of serum were found in the pericardium: the venous trunks were gorged with blood of a very dark colour. Dr. Davy ascribed the cause of Beriberia, as he calls it, to some unusual condition of the atmosphere. A good account of a Beri Beri, as it occurred in Ceylon in 1803, is given in the inaugural dissertation of Dr. C. Rogers printed at Edinburgh 1808. The nosological name which Dr. R. gives to the disease is hydrops asthmaticus. He thu describes it: "Debilitate prægressâ, dispnœa torpore, paralysi extremitatum stipata, œdemate, signis hydropis aliis eodem tempore instantibus, cursumque suum sæpius celerrime absolventibus; sæpius etiam anxietate, cordis palpitatione, vomitu, spasmisque sese comites præbentibus."

* Van, Swiet, Com 1220.

That indefatigable labourer in Science, Mason Good, had seen Hunter's scarce work, and has cursorily alluded to Colhoun's and Christie's account of Beri Beri in his work on Nosology. The disease on board the ship commenced with œdematous swelling of the feet accompanied with stiffness and numbness of the joints. These two symptoms appeared simultaneously, and a day or two preceding their appearance there was an aversion to motion. But this is not an invariable sign, for some continued their usual exercise and duty while the swelling was confined to the feet. But it rapidly extended upwards and occupied the legs and thighs, it then reached the abdomen and caused severe dyspnœa which increased so rapidly, that the patient generally died in four and twenty hours: There was often severe vomiting. In most, the face was also swelled and bloated, the urine scanty, and the bowels costive. There was no swelling, spunginess or bleeding of the gums, or any spots or sore which would be deemed scorbutic. The whole duration of the complaint, from the first seizure to its fatal termination, was often comprised within the space of two days, and it seldom exceeded twenty. Dissection shewed a small quantity of water in the cavity of the abdomen, the cellular substance all over the body was however greatly distended with fluid. The cavities of the chest and of the pericardium did not contain more than the usual quantity. The viscera of the thorax and abdomen were perfectly sound. The immediate cause of the disease has been considered to be a want of irritability or stimulating power in the blood. In consequence of this opinion evacuations followed up by stimulating and tonic medicine were used with great success, and it was found with patients on shore that the disease could not be eradicated until they were removed to a dry situation in the country, and indulged with the liberty of exercise. So much for the disease as it appeared among the native lascars.

We now proceed to notice it as it occurred in H. M. 80th Regiment at Trincomalie, in September 1798, and which is ably described by Dr. Christie. Berri Berri was considered by Dr. Christie a very peculiar disease, and of great consequence; for it had been extremely frequent amongst all the Troops, both European and native, at Trincomalie in Ceylon. In mild cases the patients were attacked with some stiffness of the legs and thighs, which was succeeded by numbness and œdema, and in some instances paralysis of the lower extremities. In the course of a few days, if not prevented by the ministration of remedies, these symptoms were succeeded by swelling of the whole body, fullness of the abdomen, weight and oppression at the præcordia, dyspnæa, starting in the sleep, and all the usual symptoms of hydrothorax. These symptoms increased, constant vomiting and spasms of the muscles intervened, the pulse became feeble, the countenance livid and extremities cold, in some cases severe fever, with delirium would accede and terminate the life of the sufferer. Other cases were more sudden and severe in the attack. The premonitory symptoms were universal sensation of debility, extreme oppression and dyspnœa, and the progress of the disease was so rapid that the patient expired after a lapse of six, twelve, twenty-four, or thirty-six hours from the commencement of the attack. In the mild cases its duration extended to several weeks. In some cases, which were sudden at the onset of the disease but not rapid in the termination although there was no external swelling; but inaddition to the other symptoms the countenance assumed the leucophlegmatic face of a dropsical *person.*

Dr. Christie's dissections exhibited more or less water in one or all the cavities of the chest; but in general, less considerable than might have been expected from the violence of the symptoms. The cellular substance surrounding the heart in some instances was loaded with water, and the heart was in three cases considerably enlarged. In one case a large coagulum of lymph was found in the right auricle. The cellular substance of the lungs in many cases was loaded with

water. In a few cases water was effused in the cellular substance on the surface of the brain, and more than an ounce of water found in the ventricles. In most cases water was found in the abdomen and cellular substance throughout the body. In many subjects there was a remarkable obesity, even after a long continuance of the disease, and although mercury and powerful medicines had been introduced into the system, men of all constitutions were attacked. The aged, sedentary, and debauched were most liable to it. The patient once attacked was more subject to frequent attacks. Women and youths under twenty were seldom attacked. A residence for some months at the station was, in Dr. Christie's opinion, necessary to the production of the disease. The greatest predisposition to it existed when troops had been eight or twelve months in the settlement. The mode of cure, adopted by Dr. Christie, with success, was to give in mild cases calomel and squills. He promoted perspiration and other evacuations by saline drinks or small doses of antimonial or James' powder. The corroborants were cordial liquors, generally gin punch, which assisted the effects of squills. By these medicines, the symptoms were ordinarily removed, in the course of a few days ; except the numbness of the extremities, which remained longer than the other symptoms. For this pediluvium and stimulant liniments were ordered.

In dyspnœa, vomiting, and spasms, a blister was applied to the breast and antispasmodics of tint. opii. cum. spt. œth: sulph :—were prescribed to be taken internally. Cramps of the muscles of the extremities supervened in convalescents, which were removed by friction and the antispasmodics already alluded to. The men of the 80th, having by experience found the advantage of reporting themselves sick the moment they were attacked, the result was that only two men died out of seventy eight attacked. Alluding to the nature and causes of the complaint, Dr. Christie was of opinion that it depended more upon the length of the residence of the men in the station than upon any particular season of the year. Some medical gentlemen thought the disease was a mere modification of the scurvy, produced by salt provisions upon which the troops were obliged to live ; but besides the great difference in the symptoms and cure of the disease, it was remarked that when the 80th arrived there, many men were affected with scurvy on the sea voyage, and yet those men were not more subject than others to Beri Beri. The scurvy was easily combatted by acid fruits which have no effect on Beri beri. Dr. Christie thought that the diet of the men was deficient in nutriment; but the ostensible cause, in his opinion, was constant exposure to the marshy vapours of the surrounding jungle and pools, to which might be added the effects of a sedentary life and a long continued abuse of spirituous liquors. The fatal termination of the disease seemed in many cases to depend less upon the extent of the affection than upon the suddenness of it, and was also probably connected with spasms of the vital organs. Such then is the outline history of this disease, and of its treatment on board of ships and on shore, in Europeans and natives ; and we hope we have been sufficiently clear to prepare our readers for the examination of the paper and work now before us.

Dr. Mouat is of opinion that much obscurity and uncertainty involve the history of Beri Beri, as described by Oriental authors. Now we do not know to whom the Doctor alludes. If he means by oriental authors the works of native authors, we are not prepared to speak upon the subject; but if he alludes to his own talented European brethren, we have shewn enough to prove that his opinion is groundless and incorrect. The value and practical utility of Mr. Hunter's labours, in our opinion, are such as need only to be made known to receive unequivocal public approbation. But then there are the writings of Dr. Christie, an author of no common-rate abilities, an elegant writer, of strong intellect and vast experience. To the opinions of these authors we have to add the able communications of Colhoun, and Doctors MacWhirter and Hare. Their writ-

ings display a degree of patient investigation and indefatigable research into the opinions of others on the nature of this extraordinary disease, and not only a laborious but comprehensive comparison of facts and lucid deductions which would, in our opinion, induce the very opposite opinion to that which has been advanced by Dr. Mouat, that the history and nature of Beri Beri are involved in "much obscurity." Dr. Mouat actually makes use of the word "*much*"—he says "*much obscurity and uncertainty.*" It is then on account of "*much obscurity and uncertainty*" which "*involve the history and nature of Beri Beri as described by Oriental authors,*" that the Doctor is induced to come forward with a case which, he thinks, will throw some light on the Pathology of Beri Beri, and "the inosculating link which connects together affections hitherto considered distinct maladies." On this ground, he hopes that "the pathologic interest of the inquiry will be a sufficient apology for bringing it to the notice of the Society." In this conclusion we heartily concur, and we can assure Dr. Mouat, that while we cannot admit of the assertion with which he sets out, we go heart and hand with him when he takes up the position only from a desire of further research.

We now proceed to quote the case itself.

June 2nd, 1833, at 1 P. M. was admitted into the Hospital of the 13th Dragoons, Serjeant Luke Hopwood, of that corps. He was 44 years old, had been 14 years in India, was a stout, healthy-looking man, though long subject to dyspeptic complaints, and is supposed to have drank hard. He had been in Hospital with Gastritis, 30th June, 1832. Dyspepsia, 16th August, 1832; and Cholera Morbus, 16th February, 1833. He was on admission affected with severe pain at the epigastrium and stomach; which appeared swollen and tense, with acute pain on the slightest pressure, constant vomiting, and the stomach rejecting every thing; also pain across the eyes, which were heavy and suffused. Can assign no cause for his complaint. Was taken ill at eight o'clock this morning, and has had two watery yellow stools: pulse full and frequent, skin natural, tongue foul. He was actively treated for Gastritis, by repeated bleedings, leeches frequently applied to the region of the stomach, purgatives & saline medicines, and he became pretty strong and well, with the exception of being dyspeptic, also pain occasionally about his stomach, and a constantly relaxed state of his bowels, which were either watery or at times slimy and green, and from 6 to 12 evacuations in the 24 hours. His pulse continued quick, his respiration hurried, and his appetite bad; and the tongue red or florid. It would be tedious to give the daily report as detailed; therefore we shall merely give the varying changes, as they were noted during the progress of the malady. On the 10th he felt his head giddy, when he stooped; on the 19th and 20th, complained of want of sleep, and appeared distressed; 21st, had some rigors, with febrile excitement; 23rd, all appetite for food gone, but was thirsty (which was noted during the whole of his disease), and he continued in this fluctuating state, sometimes fully better, occasionally a little fever at night, and still purged from four to ten times in the 24 hours, with the quick soft pulse, and red tongue already noted, till about the middle of July, when on the 18th, he first complained that his legs swelled towards night, that he felt them weak, that they ached and gave him much pain; that he had only perceived it a few evenings; and they pitted slightly on pressure. However, a slight bleeding, with purgatives, diuretics, &c. relieved him, and on the 31st, it was reported, swelling nearly gone, but still some pain in limb (now only the left leg), which for some days was the principal complaint. On the 10th August, however, the left leg again began to swell, and continued increasing, with great pain in the whole limb from the foot to the hip, also some fever, and he represents the pain shooting from the ankle to the groin; no redness or discoloration.

On the 18th, complained of his foot being dead, and cold; that he had no sensation or feeling in his foot, and little or no rest at nights; that he was unable to walk, and could scarcely put his foot to the ground.

On the 23d, some soreness at epigastrium, and dyspnœa, became low and desponding with great pain in the whole leg, and no feeling in the foot, even when pinched from below the ankle and instep to the sole of the foot; 24th, leg and thigh very painful, and much swelled: the swelling extending to the trunk, not discolored, and slightly pitting on pressure; 26th, great pain in leg, with swelling, hardness; and pain in the sheath of the femoral vessels, now first perceived on examination. Pulse very quick, perspired greatly, diarrhœa still continues, and he feels his foot cold and senseless, though it has all along appeared to his attendants warmer than natural. 28th, seems better, leg easier, but still very painful, and says he cannot keep it warm, though it is evidently above the natural temperature. He continued much in the same state till the 31st, when the leg became easier and less

swelled, but still with the sensation of coldness in his leg and thigh, and want of feeling in instep and toes,

On the 5th September, much the same, but that the pain shoots from the foot to the groin, apparently along the course of the great vessels and nerves, and the tenderness remains in the course of the vessels ; 10th, the foot now getting sore, instead of insensible, which he attributes to a warm bath he had last night; 11th, more feeling in foot, and pulse more regular, but says he has little or no rest or sleep ; 12th, feels more pain and coldnes in leg ; 13th, feels the limb cold and stiff ; 14th, no rest which seems very distressing to him ; 15th, leg pained, foot feels dead and cold, and no sleep for a long time ; very little swelling or tumefaction ; 18th, better, limb feels warmer, but in the evening again complained of pain in foot extending to the groin, and feeling of coldness in foot ; 20th, feels his foot sore ; 21st, toes of both feet feel cold and dead ; 23rd, leg up to the knee feels dead, and he is desponding; 24th, delirious at times, faulters in his speech, his movements are spasmodic ; 25th, leg feels stiff, passes his stools in bed, and appears getting paralytic ; he can scarcely protrude his tongue, and has great faultering in his speech , 26th, leg feels cold, still pain in foot, and has spasmodic twitches or convulsions when he moves or speaks. He continued in this state and getting worse till the 28th, when he was reported greatly reduced and sinking ; 29th, restless, and at times delirious, speech gone, though sensible ; 30th, dozes, and is convulsed at times.

1st October, getting worse, tremulous, and convulsed, he gradually sunk, and about 12 o'clock at noon expired.

It may here be observed, that through the whole course of the disease, the tongue was more or less red, the bowels relaxed, the stools either watery, and generally green, or muddy and even pale and slimy. The countenance and eye distressed, and the respiration quickened or oppressed, with much restlessness, weakness, and great want of sleep. The swelling of the diseased limb was always pale, and only slightly pitted on pressure ; never very tense or hard, always sore on pressure, and warm to the feel ; pulse nearly the whole time quick ; latterly very feeble.

He used the usual variety of diuretics and diaphoretics, also colchicum, nitrate of potass, alterative doses of calomel, blue pill, and pulv. antimonialis. The decoction of sarsaparilla, opiates, the sulphate of copper, the sulphate of zinc, and quinine, with tonics, wine, beer, hot baths, and fomentations, &c. during the progress and various periods of the disease.

Dissection, four hours after death, with the assistance of Dr. Clark, and Mr. Everett who have drawn up the following statement of the appearances observed.

Body, rather emaciated, but internally much more loaded, than could be expected, with fat.

Head : membranes of the brain of a natural colour ; brain rather firm in consistence - ventricles contained a small quantity of serous fluid, with about six drachms, at the base of the cranium.

Thorax: healthy throughout.

Abdomen : liver somewhat larger than natural, of a light colour and granular, as is often seen in dram-drinkers, with an old adhesion at the upper and posterior part to the diaphragm ; pancreas, enlarged ; spleen and kidneys, healthy. The cavity of the abdomen contained a few ounces of serous fluid.

Considerable disease in the venous system, particularly of the left lower extremity ; femoral and external iliac vessels of right side, rather smaller than what is generally observed, but those of the opposite very much contracted. The artery appeared much more diminished in calibre than that of the right side. The femoral vein was very small, and in several portions was nearly obliterated, by being plugged up, apparently by an organized substance in layers, adhering to the vessel, of a brown ochry colour, very similar to the substance observed in aneurisms, where Nature attempts a cure. The femoral vein was diseased to about six inches below Poupart's ligament, and extended into the external iliac to about an inch below the formation of the inferior cavæ, and this portion seemed flaccid and contracted like a piece of tape. The lower portion of the cavæ also seemed smaller than natural ; at the junction of the external and internal iliac, there was a clot formed, but not organized. The vessels were closely united together, and enveloped in a quantity of brain like fat, a good deal of which appeared in various parts of the body. The internal coat of the femoral vein in parts, was thickened, in others, as if inflamed. The interior of the arteries presented nothing remarkable, and the dissection was not made more than 9 or 10 inches down the thigh, but minutely to the heart. Dr. Clark has kindly made a preparation of the parts, which we have carefully preserved in spirits.

The foregoing case with dissection is set forth as Beri Beri, and we leave our readers to judge what analogy it bears to that disease as we have described it from the writings of Bontius, Marshall, Hunter, Christie, Colhoun, MacWhirter, Hare, Davy and Rogers. In the first place Hopwood was 44 years old, had been 14 years in India, and long subject to dispeptic complaints; he is supposed to have drank hard, was

attacked in June 1832 with gastritis, in August of the same year with the cholera morbus, and in February 1833 was admitted with pain at the epigastrium and stomach, which appeared swollen and tense, with acute pain on the slightest pressure, constant vomiting, and the stomach rejecting every thing. Here then was a case of gastritis for which alone he was treated. The result was that the urgent symptoms were removed, and the dispeptic symptoms remained with occasional pain of the stomach, and twelve watery green slimy evacuations in the course of twenty-four hours. Pulse quick, respiration hurried, &c. &c. Now what do these symptoms indicate but a constitution utterly destroyed by a habit of inebriety and repeated attacks of acute diseases in a tropical climate. What other result could Dr. Mouat expect as a sequela of such affections on such a constitution but that which followed, "*the legs swelling towards night*," aching, giving much pain, and pitting "*slightly on pressure.*" The foot naturally lost all sensation, became cold, and what was to be anticipated, but soreness of the epigastrium, dyspnœa, swelling extending to the trunk, delirium, convulsions, and death.

There is no analogy whatever in this case to Beri Beri, and how Dr. Mouat could put it down *sui generis* that disease is to us inexplicable. The more so when it is set forth to the professional world in the learned Transactions of the Medical and Physical Society, with the view of throwing "*some light on its pathology*"; nay, more to "*shew the inosculating link, which connects together affections, hitherto considered distinct maladies.*"

But we must proceed to Dr. Mouat's own remarks on the case. He considered that while this possessed "*too many of the symptoms, usually considered pathognomonic of the Beri Beri of this country, to be separated from that peculiar and distressing malady,*" the disease bore nearly "*if not all the characteristic distinctions of Phlegmasia Dolens as detailed and illustrated by Dr. Robert Lee.*" The dissection tends, in Dr. Mouat's opinion to the supposition that the two diseases, are at least so nearly allied, as to entitle them to be classed under the same head, though perhaps different in species. Our space will not admit of our following Dr. Mouat through all the circumlocutions of detail into which he has gone, in order to prove his latter position; we have said enough at least to prove that Dr. Mouat's case does not tend to clear away the "*obscurity and uncertainty*" in which he supposes the history and nature of Beri Beri as "*described by Oriental writers*" was involved.

The length of this analytical notice compels us to defer the review of Malcolmson's work till our next.

We perhaps should apologize for occupying the whole of our space allotted for review on this solitary case; but our apology is that we have been desirous of illustrating fully the history of a curious and an extraordinary disease.

HOSPITAL REPORTS.

We have the gratification to present to our readers another important communication from our able correspondent Dr. Finch. The Lithographic drawings have been done by a gentleman of great talents, and we have no doubt will afford Dr. Finch satisfaction. We are now making arrangements to have a person of abilities, who can draw on stone, and colour Lithographic drawings, added to our establishment, so that all coloured drawings of preparations of morbid anatomy, of plants, flora, and figures will be done under our own immediate inspection. We therefore beg to invite communications with drawings on morbid Anatomy, Botany, Geology and instruments, especially those with which natives operate in the Upper Provinces. Communications like these excite great interest among our brethren in Europe where we shall do our utmost to obtain for our journal an extensive circulation, that we may effectually develope in Europe the talents which exist in India.

Dr. Finch's Case of Renal & Urinary Calculi.

Fig: 1st
Section of the right Kidney

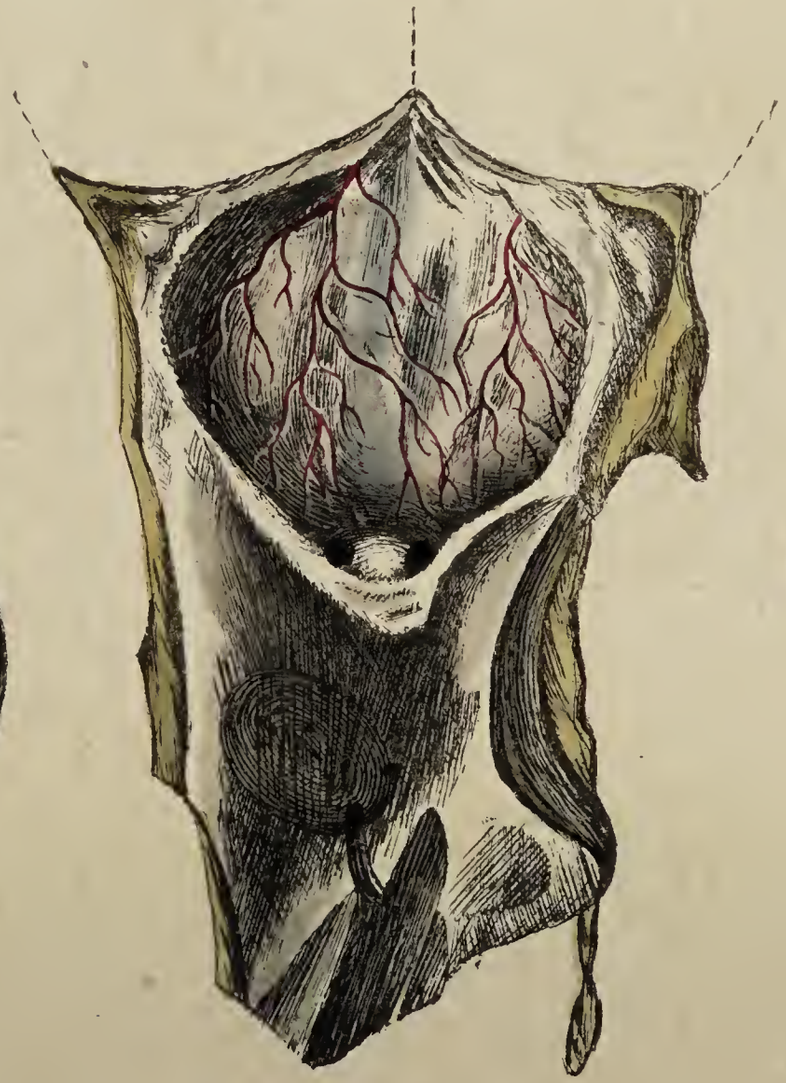

Fig: 3rd
Section of the Bladder

Fig: 2nd
Section of the left Kidney

CASE OF RENAL AND URINARY CALCULI, *May* 23. 1834.

Shaikh Kureembuxsh, aged 18, a camp-follower, says that since he was nine years old he had occasionally experienced difficulty and pain in voiding his urine which have greatly increased during the last four years. He adds that these symptoms return periodically, they continue severe for a few days, and then he enjoy a respite for two or three months, latterly these intervals of relief have become much shorter and his sufferings much greater which have induced him to ask for medical aid.

At this time, May 23, he has excruciating pain during micturition to which he has almost incessant calls and can only pass his urine guttatim. He is extremely emaciated, his appetite is much diminished, tongue foul and furred, pulse small and frequent, bowels costive, sleep much disturbed and can only be obtained when he lies on his abdomen. The urine is scanty and muddy, and mixed with a large quantity of mucopurulent fluid which immediately separates on ejection and seems to contain a very large proportion of pus. Under examination by the sound the urethra was very irritable, and an endeavour being made to pass the instrument into the bladder it met with an obstacle near the neck of that organ and immediately behind the membranous portion of the urethra; but with a slight degree of force and gentle movements passed into the bladder, giving the sensation during its passage of its traversing a bony canal from its reaching the arch of the pubis till its admission into the bladder. On the introduction of the finger per anum, a hard body was felt at the neck of the bladder in size and form like a fowl's egg: the smaller end was embedded in the termination of the urethra so as effectually to obstruct the flow of urine. and was found immoveable, the attempts made to dislodge it causing a great deal of pain were desisted from; the extremity of the sound was felt distinctly passing under, and in contact with, the extraneous body and having the concavity of its curve filled by it.

On his admission into hospital he was ordered the warm-bath daily, the liquor sub-carb. potassæ and an anodyne draught at night. On the 1st June he complained of increased pain in his bladder and was feverish, he had a dose of castor-oil, and leeches were applied to the perineum and over the bladder with a frequent change of warm poultices: in consequence of an increased difficulty almost amounting to a retention of urine, another examination was made and renewed efforts to dislodge the stone, of the presence of which there could be no doubt from the previous introduction of the sound. From the application of the leeches and frequent change of poultices, together with the warm bath, the parts were found very relaxed and the attempts to remove the stone were more successful, it was thrust backwards into the bladder leaving the orifice of the urethra clear and allowing a free egress to the urine which brought immediate relief to the sufferer.

After the subsidence of the febrile symptoms and with a view of benefiting his general health previous to submitting him to operation for lithotomy for which he was very importunate, and which it would have been useless to undertake in his present state, he was recommended to continue the bath and anodyne draughts daily, and the following mixture prescribed.

R. Inf. Cheyrettæ ʒ vi.—Inf. Sennæ ʒiss.—Liq. Sub-carb. Potassæ ʒss.—H. Sumat ʒi. ter die.

It is needless to transcribe his case for the remaining period he remained in Hospital, as he continued to take the same medicine, suffice it to say that he became daily more emaciated, lost all appetite, his stomach became irritable, the sphincta of the bladder impotent, he had incontinence of urine, and on the evening of the 31st July, he suddenly expired.

Sectio Cadaveris.

He was badly made, he had a short flat chest and long emaciated limbs.

On a section of the abdomen, the liver, spleen and stomach were found healthy. The lining membrane of the abdominal cavity appeared more vascular than usual, as also the peritoneal coat of the whole of the smaller intestines especially of the ileum, the villous lining of the intestinal canal was also unusually vascular, and a portion of the ileum about six inches of a very dark colour.

The large intestines were very vasculated in their whole length.

Both kidneys were much diseased and thrice their natural size. On dividing the right kidney which was very inflamed externally, the scalpel was felt to rasp against a gritty substance and gave exit to a large quantity of purulent matter—when the whole of this had escaped it was found to have been contained in numerous large cysts* which occupied the whole body of the organ the original structure having been completely destroyed—both in its secreting and mammillary portions. Out of these cysts three calculi were extracted of an arborescent form, the largest was found in the part of the gland having

* See Plate, Fig. 1.

its branches embedded in the cortical substance.

The left kidney was less than the right, and its structure had suffered less change, its medullary and cortical portions were distinct and the pelvis easily seen ; it contained three or four large and deep cysts and a few smaller and superficial ones filled with purulent, but without any admixture of calcareous, matter.

Both ureters were distended with pus from the kidney to the bladder.

The bladder was small and its parietes of a fleshy consistence especially towards its fundus—its capacity was much reduced and scarcely capable of containing above a few ounces of urine. The mucous surface was much thickened, vascular, and exhibited patches of gangrenous inflammation and ecchymosed spots. It contained a small quantity of fœtid pus aud an oblong calculus of the size of a fowl's egg, weighing upwards of ʒvi. and composed of urate of lime.

The urethra was healthy in its whole length.

Remarks.

Notwithstanding the result of the case exhibits such complication of disease of the kidneys with the presence of renal and urinary calculi the man did not complain of pain in the loins or any of the other signs attendant on disease of these organs ; but referred to the bladder as the seat of his sufferings where they were no doubt most severe. The diseased condition of the kidneys apparent after death accounted for the man's only finding relief by lying on his abdomen and was the only unequivocal symptom which might have given origin to suspicion of disorder of those glands ; but was referred during his life to the change of position which this posture might have effected in the extraneous body lodged in the bladder.

From this man's situation, a camp follower, I was unable to procure accurate information regarding his former ailings, but was told by his last employer that he was frequently indisposed, often declined his food, occasionally laboured under fever, and appeared in great pain for days together.

I desisted from performing the operation of lithotomy on this unfortunate man notwithstanding his repeated entreaties, in consequence of his very feeble and emaciated state on admission into hospital and was ultimately deterred from it when the incontinence of urine ensued. I was confirmed in my decision by the persual of a paper in the 1st vol. of the Med-Chir. Trans. by Mr. J. Forster, in which he strongly dissuades from undertaking the operation in cases where the bladder has lost its powers as unlikely to be attended with success. He gives the result of one case and mentions that he had refused to cut two otherswhere the debility was considerable and where the action of the bladder was entirely lost. I do not think that a great discharge of muco-purulent fluid is a sufficient strong contra-indication to the performance of the operation, as I have known it attended with success in a recent case, where the admixture of pus was very large and the disease of long standing. The lad is now perfectly well and capable of earning his livelihood, nor would that symptom have deterred me in the present instance if unaccompanied with more unfavourable ones.

The dissection of the case plainly shews that no operation could have succeeded while we know of no method of dissolving or removing renal calculi.

CASE OF ELEPHANTIASIS WITH EXCISION.

The following case of elephantiasis with excision by Mr. Green will be read with great interest by the Profession. We regret much that the intelligent writer did not furnish a drawing of the tumour. We have a similar case with a drawing communicated by Dr. Vos ; which we intend to publish in our next number. With the exception that the elongation and enlargement are of the scrotum in a man of 40 years of age and in good health, the disease is the same as in Mr. Green's patient. No doubt this tumour may be removed with safety. The cause of death in Mr. Green's case proceeded unquestionably from constitutional organic derangement.

A. B. a married female of about 25 years of age, in a very poor and dejected condition, presented herself at the Hospital of Mymunsing in August 1834. She had a large tumor of the size of an infant's head depending out of the right labium pudendi ; the tumor extended by a neck from the labium and adipose tissue of the mons veneris of the same side as far down as the knee ; the neck was soft and evidently consisted of merely adipose structure ; the dependent part of the tumor was round and hard, its surface uneven, and ulcerated in two places inferiorly, the ulcers excavated to the extent of half an inch, their walls smooth and discharging a thin fœtid sanies, their bases projecting and nodular : the fine membrane lining the labium was continuous with the covering of the tumor on its inner side, and at the point of junction the mucous membrane was fissured, the

margins of the fissures rounded and smooth, these blending with a white hard fibrous condition of the skin. The history of the case given was that an enlargement of the part first took place two years ago, but that the tumor had increased to its present dimension within the last six months. The poor woman suffered great pain from the ulcers, she was an outcast from her home, her life was miserable and she requested to have the mass removed.

Previously to performing the operation I did not suspect the existence of any visceral disease. The operation consisted in making an incision on each side of the neck of the tumor, the two forming together the shape of a leaf, and thus removing it, taking care to carry away all enlarged or unhealthy looking portions of adipose tissue; several ounces of blood were lost from the vascular state of the labium and its lining membrane; the sides of the wound were brought together by three stitches and adhesive plaister. Pain was felt in the wound for the first three or four days, the stitches soon gave way from the unavoidable motion of the limb, the wound looked clean but sluggish, the edges not inclined to unite; a poultice was applied and subsequently caustic and scarification; the pulse was small and feeble; port wine and bark were administered; disease in the lungs now came on evidenced by cough, expectoration, and quickened respiration; dysentery supervened with pain on pressure over the ascending colon; the woman became so reduced in strength as hardly to be able to stir on the bed, and ultimately scarcely to speak; the edges of the wound skinned over, and remained separated, the surface had a dry, inactive aspect. She died one month after the removal of the tumor.

Upon examination of the body a few hours after death, I found a tuberculated state of the lung, and inflamed and ulcerated state of a portion of the colon; the spleen was shedded externally and throughout its structure with tubercles, firm and of a white fibrous appearance, as large as almonds. The tumor which had been removed exhibited upon incision through it a progressive state of disease, the upper portion including the neck consisted of an enlarged state of the cells of adipose tissue, after the division of which some fluid oozed out; lower down the fat disappeared, the cellular membrane was closely compacted together, and a serous fluid followed copiously the use of the knife; the inferior two-fifths of the mass was a hard, white, homogeneous substance, of this the eminences at the base of the ulcers were composed. I observed in the tumor neither enlarged veins nor absorbents.

The subject of this case had a flabby unhealthy appearance, but was not emaciated at all when she applied for relief. It may be a question, whether death was occasioned by the morbid taint remaining in the blood, and showing itself in the disease of the viscera, after its point of external developement was removed; or whether the shock of the operation, and consequent reaction, was more than the enfeebled powers of life in the viscera and body generally could bear, and thus led to the fatal result; or probably the most correct view is, that the train, though smothered, was already laid in the tubercular state of the spleen and lungs co-existent with the tumor, and merely required the disturbance of the operation to explode it, and destroy life.

W. A. Green,
Civil Assistant Surgeon,
Moradabaa.

THE INDIA
JOURNAL ON MEDICAL SCIENCE.

CALCUTTA, AUGUST 1, 1835.

Fever Hospital.—We have been favored with a printed copy of the Proceedings of the Governors of the Native Hospital, relative to the establishment of a Fever Hospital for the relief of natives. We have also been favored with some remarks on these proceedings by Dr. Vos. The chief object the Governors had in view was to draw the attention of the public to the fact that thousands of the poorer natives in and about Calcutta were continually exposed to the ravages of the more prevalent diseases of the country, and that a very large proportion, without a chance of being relieved, die in thousands, not from the original force of the disease, but from the want of an asylum like that now proposed. Dr. Vos states that in Calcutta it is seldom that any dead body is found in the streets, for had that been the case he, who is always in the habit of seeing and examining them himself, would have known it. He states that a Police Hospital has existed many years which is intended for destitute people found in the streets, who are carried thither

by the Police Peons for medical attendance &c. The Native Hospital of Calcutta is, Mr. Martin says, more strictly a surgical institution, and Dr. Vos states that scarcely any other patients are admitted in that hospital as house patients, but that they are sent from the Native Hospital to the Police Hospital, even some with sores and venereal disease. He adds that he has received seven or eight patients at a time who had been house patients of the Native Hospital. It appears then that the cases treated at the Native Hospital are not of house patients which are exclusively confined to the Police Hospital. Dr. Vos informs us, that he has had for many years past seldom less than 80, and in the rains 130 to 180 patients and even above that number. For the convenience of the native population Mr. Martin suggests that a spacious house should be secured for the hospital in a more central situation than that now occupied by the Dispensary ; but Dr. Vos objects to the spot pointed out by Mr. Martin because the neighbourhood is crowded. He conceives that although the Petty Court Jail is not one of the best positions, it is however more open than that proposed by Mr. Martin. Such are the opinions of Dr. Vos and his objections to some parts in the statement of the Governors. We now proceed to quote some practical observations elicited from the information furnished to Dr. Jackson by Baboo Ramcomol Sen. They shew at once the necessity, not of one, but of many hospitals for the reception of the sick among destitute natives.

"In the Suburbs of Calcutta" says Dr. Jackson, " the drains are badly kept—water does not find its free passage in them, and amongst crowded gardens, full of marshy places surrounded by jungul, the free circulation of air is prevented, while the decayed leaves and vegetable substances thrown into the stagnant water create Malaria and produce Fever. I have seen that few of the laborers, peasants, and poorer class of people living in the Suburbs, escape its effects, and even the higher class of people are attacked with it, and a large portion of them fall victims to it."

'Those who cannot afford preventive means such as covering of the body, raised bed, &c., and are obliged to live upon succulent vegetables, lie on the damp ground, are barefooted, and bare headed, suffer more, and the Fever becomes frequently general and epidemic in certain spots.

People from various parts of Bengal come to Calcutta to seek for employment, to beg charity and assistance from their friends and acquaintance, and for speculations.

They come and live with persons who are employed in offices, and workmen, and those who follow menial professions, and whose means are very limited. If they are able or willing to live separately, they hire lodgings in some hut or old building, the small apartments of which are let from 2 annas to 2 rupees a month. These people do not possess a sufficient quantity of clothing ; they are naked almost day and night ; they have no bed, and lie down on mats and leaves spread on the damp ground in their cells or holes—in hot weather they sleep out in open places, and on the borders of the road, exposed to the weather, and all its changes.

When they get Fever or Cholera, they have nobody to attend on them, nor have they any means to procure Medical aid, clothing or food suitable to the state of their health. If it is Fever, it increases and becomes violent day by day : many cannot afford to buy even a dose of *Panchun*, * which costs but one pyce, and even if the people of the house or their neighbours give him pyce enough to purchase it, they have neither place nor means to prepare it ; and destitute of all the comforts and necessaries of life, their illnesses soon arrive at a stage in which their recovery must be considered doubtful, and always dangerous. While they are, without any care and attention being paid to them, expoposed to the vicissitudes of atmosphere, with nothing but unwholesome water for drink.

The friends of the miserable being with whom he lives, or at whose place he hires his lodging, finding his case bad, become alarmed, send for a Byda † to prescribe for him. Because the landlord or host now becomes involved in another difficulty : he cannot attend himself to the sick, and neither has or can give means to take proper care of him, and therefore to get rid of his sick tenant or guest, these are the modes usually resorted to : he procures him either a boat or dooly to carry him to his family, in the country, which he never or at least seldom reaches. By the shaking and agitation he receives in his weak state, exposed to the weather, he soon dies. I have seen boatmen and bearers of-

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*The commonest and cheapest Native remedy.
† Native Doctor.

ten put down such men on the ghats and bank of the river, &c., where in a few hours they have expired, or are often attacked by beasts of prey before they cease to breathe.

2d. The second and more convenient mode adopted in Calcutta for disposing of such men, is to carry him to the bank of the river, and there to place him under the charge of some hired people at the ghat of the river, waiting his dissolution.

This mode is considered more convenient and less expensive both for the deceased as well as the persons to whom he was attached. Another reason for this also is the well known Hindoo belief, that when a sick man considers that he has no hope left of being recovered, he had better die by the holy stream. Allowing the sick to die in his cell, and throwing his body into the stream, is reckoned infamous and disgraceful both to the survivors and friends of the deceased, and cruel and unbecoming in the persons with whom he has lived. But if he dies on the bank of the Ganges there is some consolation for his family and friends, and at the same time it saves the landlord or his host from the reproaches, which might otherwise be poured upon him by the friends who think that they have done all that could be offered to a man in a dying or distressed situation. They are supposed to have administered him medicine, supplied him with food, and have done the last service a dying man requires, and at the same time not suspected of having robbed the deceased of his property. For if his friends or his landlord allow him to die in the house they are afraid of being annoyed by the Police, who would come to investigate the cause of the man's death, and make enquiries as to whether he had left any property, before they would allow the dead body to be removed. It is not always an easy task to get rid of the Police men without some trouble and expence. Besides nobody but persons of his own class or caste could or would touch the dead body, much less dispose of it.

It is to these circumstances that the *Unterjale*, or Ghaut Murder, owes its derivation, about which so much has of late been said in the Calcutta papers."

Now after such a picture of misery and wretchedness, to which thousands are reduced, of what avail will one Fever Hospital be as proposed by the committee of the Governors of the Native Hospital?

Mr. Smith in his able address to the committee states that,

"Upon referring to a Map of this City, it will be seen that it is a dense mass of Native houses and huts, which, from the Native Hospital northward, occupies an area of some three miles in length, by a mile and a half in breadth; that within this space, large indeed when considered with reference to its population, we have not a single establishment, save and excepting that of Gurranhutta, which is by no means centrically placed, and even if it was, would be quite inadequate to its wants even in times of ordinary sickness."

Mr. Smith might have added that the poor, whom Dr. Jackson so faithfully describes, have not the means of obtaining conveyance to the Fever Hospital, and being friendless and destitute they have no one who will communicate to the Police their wretched condition; until on the point of death the people, among whom they reside, merely to guard against the pernicious effects of a putrid corpse, have them removed to a Ghât where they perish.

Under these circumstances we conceive the proposition now before the public praiseworthy to the extent it goes, but that is so limited, that no very great ulterior good can be obtained in a metropolis where there is so much cause for pestilence and so little disposition shewn to have it removed. We fully concur in the very accurate and concise remarks of Mr. Martin on the topography of Calcutta. What will the people of Europe say when they read the following account of the far-famed City of Palaces, given as it is by a gentleman of Mr. Martin's experience, who has been so many years a practitioner at this Presidency?

"It may be useful to look back for a moment to what Calcutta *was* in the earlier periods of its occupancy by Europeans; and from many accounts that might be cited, I have chosen the following, from the travels of Captain Alexander Hamilton, who visited India between the years 1688 and 1733.

"'One year I was there, and there were reckoned in August about twelve hundred English, some military, some servants of the Company, some private merchants residing in the town, and some seamen belonging to the shipping lying at the town, and before the beginning of January there were four hundred and sixty burials registered in the clerk's books of Mortality.'

"This worse than Batavian condition, and frightful suffering, are ascribed by Captain Hamilton, to the annual subsiding of the salt water lake; leaving its marshy banks cover-

ed with fish and exposed to a vertical sun. No doubt this had a most injurious effect; but the unimproved state of the grounds in and about the town—the marsh and rank vegetation, producing constant unwholesome exhalations, retained and accumulated in a humid atmosphere—these too had their full share. On the subject of the choice of Calcutta as the site of the British "emporium," the same authority declares, that Mr. Job Charnock had no better reason for it, than its possessing 'a large shady tree,' (!!) and it is further added (truly enough) that 'he could not have chosen a more unhealthy place on all the river.'

"In more recent times, it was the custom of the European Inhabitants of Calcutta to meet on the 15th of December of each year, to congratulate each other on their escape from the period so emphatically marked by Captain Hamilton; but though this is no longer considered necessary on account of the insalubrity of the place, still I think it will not be difficult to shew that we are far indeed from having effected for our 'emporium' all that might, or ought to have been done for it. For many years to come, little more can be expected from that commercial and private enterprise to which Calcutta has hitherto owed so much; and it therefore becomes the more urgent on the part of a great and liberal Government, to take a lead in so humane and beneficial an undertaking.

"In the event of a contagious disease (and there is no reason why such should not occur here), the dense state of the Burra-Bazar and surrounding parts, the want of facility for removing accumulations of filth, &c. would stand as insuperable bars to the best devised regulations of medical police. All masses of buildings should be opened out, old walls and decayed buildings removed; for these are fertile sources of fever, even under ordinary circumstances.

"If it amount to a demonstration, as stated by a distinguished author, that 'freedom from some of the most fatal scourges of the human race, and a gradual amelioration of health' can be traced to the 'free exposure of the streets of London* to the sun and wind, a hard regular pavement, preserved clean by proper scavengers, the construction of common sewers and privies, and the advantages of a flowing stream,' what amelioration of the public health may not be expected from similar measures in such a city as this, situated as it is within the tropic?

"There is probably no subject, connected with the public comfort and health of a city, of more consequence than the state of the sewers. Those of Calcutta throughout, I believe to be defective in number, construction, and fall, without which last, the most approved plan gives no real usefulness.

"As the river water, during the greater part of the year, is brackish, and unfit for general use, the chief supply for all classes of Natives is derived from tanks which, properly constructed, ought generally to contain wholesome water; but purity being an object of great importance, it is to be regretted that more attention has not been bestowed on the construction of these reservoirs.

"If the wealthier Natives must need have tanks within their premises, the Police should oblige their being kept clean; for at present, I am told, they are universally in a neglected and filthy state.

"No burying-ground should be allowed to be in use near the Town, and the Native one off Lower Circular Road should be closed and brought into cultivation so soon as possible. I have known it complained of by persons residing in the neighbourhood.

"All butcher's markets and slaughter houses should be removed to the outskirts of the Town, on the river bank, and be constructed on more approved principles than any now extant. The Tiretta's bazar does little credit to European taste, whether as respects situation or cleanliness.

"All I have said of the Native City applies to the inner Suburbs called Kurbalah, Simlea, Mirzapore, Paritollah and Collingah, where defective drainage and half-dried tanks are every where to be found.

"What I am about to notice regarding the Suburbs is from repeated personal observation. I began north-east of the Town, about Chitpore, and carried my examinations toward the south, until I reached Mr. Kyd's dock-yard. I have personally examined Chitpore, Nundenbaug, Baharsimlah, Komar Parrah, and Seealdah, and find that one description will serve for all, viz. general irregularity of ground, affording lodgments of various extents for stagnant waters, now very offensive; drainage every where defective, and good tank water scarce. There are also belts of jungle trees and underwood, obstructing ventilation. In all these villages the replies of the Natives confirmed what indeed any one could have predicted, as to the general prevalence of remittent and intermittent fevers.

"The new earth dug from the canal, and now heaped all round might readily be made use of to level and fill up the thousand pits and half-dried tanks which now form such fertile sources of noxious exhalations in

* 'Dr. Caius, the most eminent physician in England at that period, states that the mortality of London from ague in 1558 was such that the living could hardly bury the dead.'

these villages. The banks of the canal should be carefully preserved from all accumulations of filth and rank vegetation. This applies especially to the head of the old canal at Baliaghatta, where it should be deepened, and where I have often observed the banks in a noisome and neglected state.

"From the frequency with which I have seen the unhealthy state of the Suburb of Entally set forth in the daily prints, by persons professing themselves inhabitants, I had expected to find more of the sources of fever there than in the last mentioned villages; but in truth they are all bad enough, and the difference as regards Entally lies chiefly in this, that a large proportion of its inhabitants are Christians, and can make their grievances known. Entally is fully in as neglected a state as any locality pointed out in this paper, and any one need only observe, to know the remedy. It is so obvious, that I need not enter on what would be but a repetition.

"The drains of Ballygunge are all in a neglected condition, and require clearing, with a proper fall. There is also much bamboo and other jungle, all around, which ought to be rooted out. I know of no quarter near Calcutta so much in need of this latter.

"This is the most populous of the Native Suburbs, and I believe it was the most severely visited by the remittent fever of last season. To this 'bad eminence' it would seem fully entitled through its low, closely-built and ill-ventilated streets, its great stagnant ditches, lined with rank vegetation, its back-ground of extensive marsh and underwood, and its innumerable half-dried tanks and pools. The Native residents whom I questioned on the spot, spoke of the last year's fever as universal, and declared its ravages as having been more extensive than the oldest of them had ever seen. No doubt all this is true, for epidemics are observed in all countries to fasten with the firmest gripe on such localities: they are 'accessories in fostering and multiplying' them. Stavorinus, speaking of the 'sort of sickness or fever' which generally prevailed amongst the Natives about Calcutta during his visits (1768—1771) says, that it 'generally sweeps away those who are attacked by it in the space of three days.'*

The foregoing extracts shew how far beyond this city of splendid and elegant buildings are all other civilized cities with respect to Medical Police and removal of local causes of disease. To whom does the blame attach, that the inhabitants of this rich and beautiful metropolis are left to the ravages of pestilence whenever the masses of filth and corruption are brought into baneful operation by excessive heat and moisture? the blame must rest somewhere. Let benevolent individuals then convene themselves together to consider how they can construct hospitals for the reception of the multitudes of the dying poor. Let the Police Surgeon come forward with his objections to spots for the buildings on account of the crowded state of the city. Well may Mr. Martin warn the inhabitants that the neglected state of Calcutta is engendering causes which were developed with such violence at the time of Hamilton, when the European inhabitants were in the habit of meeting, not to espouse the cause of the Freedom of the Press, not to join in festive entertainments or political meetings; but to congratulate each other on their escape from fever and death.

But we have shewn enough to convince any unprejudiced mind of the necessity of erecting not one only but many hospitals for the reception of the poor, and we agree with Mr. Martin that, if the respectable portion of the native inhabitants cannot be prevailed upon to come forward with voluntary subscriptions in such a laudable and benevolent cause, the treasury of the Government must be appealed to. A Member of the Supreme Council has declared that he did not see how the public revenue could be applied to a better purpose than that of saving the lives of those who pay it. Nor can we; and we trust our present distinguished Governor General, who is so celebrated for personal acts of distinguished benevolence, will unloose the purse strings of the Government, and thereby gain for it a branch of that laurel for munificence and charity which he himself so justly wears. In pleading the cause of public charity at the door of the state treasury, we have found Sir Charles

* Voyage to the East Indies by Stavorinus.

Metcalfe so eager to be liberal, that he would not allow the Government treasury door to be unlocked, in order that he might enjoy the gratification of opening his own, which is never shut against such a cause. But, in pursuing this system, noble as it is, we trust, he will not oppose the present just appeal to the Government treasury. We trust he will not put any obstacle in the way of a public application to the funds of the Government. Including the suburbs of Bhowanipore, Kidderpore, Cullingah, Entally, Sham-Bazar and Baug-Bazar, eight Native Hospitals at least are desiderated. These might be erected upon convenient but smaller states, if a lakh of rupees should be realized. Let the Government give to each hospital a native doctor, with a proportionate supply of medicine. The native doctor might inspect his own district of the sick poor who could not be prevailed upon to enter the hospital: such, for instance, as females of all ages. Medicine might be dispensed to others who would willingly come to the hospital for medical advice. Such of the Presidency Surgeons as have time to spare could take a division in their own districts to whom the reports of the sick might be made, and who would afford advice in a cause so humane, and take an interest in seeing the due performance of duty on the part of the hospital servants, who would be placed under their especial care and controul.

Although we have always been of opinion that, where the circumstances of medical men admit of it, they should tender, as in other parts of the world, their professional labours gratuitiously to really charitable institutions; but the institutions now in contemplation should be maintained principally out of the revenues of the country, they being solely for the benefit of the people, and medical men are as much entitled to reward from the revenue as the Civilian who ministers justice to the people of the country, or the Soldier who protects it from foreign invasion.

We would therefore suggest that Government make some allowance to the medical gentlemen who superintend these various hospitals in order to cover the expence of conveyance &c. and we are sure it will be found that such an expenditure in such a cause, while it will redound to the credit of the British Government for humanity, will be but just to a body of men, who, as Presidency Surgeons only, are miserably paid. The extent of a Presidency Surgeon's receipts is only 490 Rupees per mensem.

Having expressed our opinion as respects the means of affording relief to the destitute sick, we now proceed to state the objection of the natives themselves to the plan of a Fever Hospital as laid down by the Governors of the Native Hospital. In the first place it has been asked by the natives whether by the Fever Hospital is meant an institution in which patients with *Tap* only are to be admitted? The opinion generally entertained is, that by the name of Fever Hospital patients of other diseases are excluded. We should therefore conclude that the name "Fever Hospital" is inappropriate, and should be altered.

Another argument has been brought to our notice by an intelligent and influential native. He says, that if a lakh of rupees is to be expended on one hospital, which the *sáhib log* state to be necessary for the erection of one, then the feeling of the people is, that the provision is not for the destitute sick but an expenditure on brick and mortar. When we heard such a proposition started, we were satisfied it was ill judged. The state of the native mind towards these benevolent objects, and their ideas of the ulterior benefits for the gifts they bestow, are not consonant to such a proposition as this. Besides the natives say the Hospital is for the poor who do not need splendid and lofty buildings for their recovery from filthy and loathsome diseases. But as such must be the building when a lakh is required for its erection, they conclude that all is a mere job, and that the Fever Hospital is not to be raised for the sake of the destitute sick, but that the object is to get their money.

When we look at the buildings in which some of the most wealthy of the native inhabitants dwell, we should think it would be wise in the present state of their feeling and habits to make arrangements and plans accordingly when intended exclusively to be supported by them.

The only remaining objection was stated in our last number, and the length to which we have already gone on this subject, important as it is, prevents our recurring to it.

MEDICAL AND PHYSICAL SOCIETY'S MEETING.

Saturday, May 2, 1835.

Dr. Wallich F. R. S. in the chair.

Several communications were laid before the Society; but as these will be noticed in due course, we shall proceed to advert to those papers only which were read, and discussed. Mr. Twining's paper on Gastro Enteritis was read. The following is an extract from the report of it, by Mr. Hutchinson the Secretary.

" Andral has asserted, that in every ten cases of acute disease, there are about 8, in which the structure or functions of the alimentary canal suffer from some derangement, and that in chronic diseases of every description, there are very few in which the structure of the mucous membrane of the digestive apparatus, does not undergo some alteration. When we refer to the vast number of symptoms denominated dyspeptic, which depend on the existence of acute inflammation of the stomach, or upper portion of the intestinal canal, more or less acute in its nature, and varying in the extent of the part affected ;—and when we add to these maladies those colliquative diarrhœas and other affections, which often attend the ulterior stages of phthisis pulmonalis, and of hepatic suppuration, as well as the alvine profluvia attendant on the conclusion of incurable affections of the spleen, and some modifications of diseased mesenteric glands, it will at once be apparent, that we must have to treat gastro-enteritis, or some of its consequences at some stage of a very great proportion of the diseases, which affect the human frame. When Hunter denominated the region of the stomach and the adjacent solar plexus, the centre of sympathy of the human system in health, we cannot hesitate in admitting the necessity of paying due attention to the same part when affected by disease. It will be evident, that a subject so extensive, and so important in all its relations, is beyond the compass, of an essay, adapted to one. Evening's discussion, therefore, the author has chosen on this occasion, to call the attention of the society, to some varieties of Gastro-Enteritis, remarkable at once for the obscurity of their symptoms, and the intensity of the febrile affection, which proves fatal. He has also shown that it is probable, that an inflammatory affection of the stomach may sometimes be excited by the use of the sulphate of quinine in some febrile affections. Three cases only are introduced with this essay. The first of which was a tall and thin man, 29 years of age, and 5 years in Bengal. He had an attack of dysenteric purging on the 24th Nov. attended with slight pyrexia, and cerebral affection, which were symptoms reduced by bleeding from the arm, and the repeated application of leeches and the usual treatment for dysentery. In the beginning of December there was a daily febrile exacerbation, for which the sulphate of quinine was administered ; but without much effect on the fever, therefore leeches were repeatedly applied to the belly, and calomel was administered till the mouth became sore, and the distinct febrile exacerbations ceased. Still he remained weak and despondent, the tongue became dry and covered with a tan-coloured fur, which continued, although the alvine secretions were much improved. There was no morbid heat of skin, nor any preternatural frequency or force of the arterial action. He neither complained of pain or uneasiness of any sort, and died on the 12th December 1833. On dissection, extensive inflammation of the stomach was found extending through all its coats. In the 2nd case the patient was 26 years of age, and the disease commenced as ardent fever on the 27th Sept. 1834. There was no rigor, and at first cerebral symptoms were predominant. The pyrexia was subdued by active antiphlogistic treatment, and after the cerebral symptoms had abated some tension of the muscles of the belly and morbid sensibility of the epigastric region were observed. Leeches, mild aperients, and antimonials, removed these complaints ; and when he was free from fever, but weak, some sulphate of quinine was ordered, and on the next day he had a return of pyrexia, with despondency, the tongue became of a morbid red colour, its centre was dry, brown, and hard, and the edges moist, red, and raw, or excoriated. A mild antiphlogistic treatment was again resorted to with benefit. This man ultimately recovered ; but when his convalescence was far advanced, he had a distinct attack of hepatic congestion with

pain in the right shoulder, as well as palpable enlargement, and morbid sensibility of the right lobe of the liver.

The third case had also commenced as fever, attended with vomiting, and followed by constipation. The patient was 30 years of age, a sailor of large frame, but extremely emaciated when he came under treatment on the 21st February 1835. The muscles of the abdomen were then tense, and the belly flat and retracted : there was a tendency to constipation ; but very small doses of medicine purged him violently ; and obstruction recurred immediately afterwards. The tongue was glutinous, but not much loaded with mucus, and although moist, its substance was hard, and its shape pointed. This man's disease was of six week's duration. No remedies were of any avail in this case, and the patient died 4 days after he came under treatment. On inspection, there was morbid vascularity of the stomach, the small intestines were contracted, and their coats thickened. There was also an extreme degree of inflammation of the mucous membrane of the great intestines. In two of these cases the symptoms, more distinctly referrible to gastro enteritis, arose soon after the administration of the sulphate of quinine. In each of the three, we find a different state of the tongue was remarkable, and the consideration of the particular state of the tongue in reference to the ascertained seat of the predominant local affection is interesting."

Mr. Corbyn said, he rose in consequence of a statement just read which opposed the administration of purgatives.* The symptoms in these cases are said to have been occasioned by gastro enteritis, and in the description of their treatment there was so much of the opinion of Broussais in the detail, that he (Mr. C.) should always feel it his duty to combat them upon every occasion on which they were brought forward. M. Broussais has accused British practitioners of the misuse of purgatives ; but he (Mr. C.) would venture to say, that the practice of Abernethy and that of other British practitioners had established itself by its success, and was not to be put down, however popular the disquisition, when that was built upon theory only. Now M. Broussais was a very young man when he first br oached his opinions : these were not therefore grounded on experience. Mr. Corbyn had no hesitation in saying that in an hospital of 100 patients in this country, treated on the system laid down by the Parisian physician at least eighty out of the hundred would die, whereas the system of free purgation adopted by British physicians was universally successful, and they seldom had those numerous post-mortem examinations to make which exhibited gastro enteritis symptoms so frequently the consequence of neglect of free purgation. Mr. Corbyn would particularly call attention to the fatal cases before the Society. The system of treatment was the same as recommended by Broussais, viz : mild purgatives and topical bleeding. Mr. Corbyn was a zealous advocate for bleeding, but he never would allow, it could be of any use unless the bowels were also well purged.

Mr. Twining prefaced his remarks by recurring to an outline of the symptoms of the cases he had given, and to the injurious tendency of giving quinine in fevers where inflammation existed, in which cases he recommended mild purgatives, he also abstained from giving quinine in cases where the head was affected. Mr. Twining did not concur in all of Broussais opinion ; but he believed in general his treatment was good, as it referred to the habits and customs of the French people. Their system of diet, the mild wines the French people drank, produced habits different to those of the people of Britain, who required more active purgatives than the French people. So different were the habits of people who lived in the county to those who lived in large towns, that the management of their different constitutions needed also a difference of treatment. Mr. Twining was of opinion that purgatives in febrile affections were good. But after the bowels were cleared out, frequent purgatives did harm. The Italian method of treating disease, after the bowels were cleared out, was in his opinion beneficial, which consisted in giving a little water. The people of this country gave only a little sugar and water. Much harm in his opinion was done in this

* The observations to which we allude have not been published in the Secretary's report.

country by giving purgatives when the alvine discharges became dark after purgations.

Mr. Hutchinson was of opinion that the cases were not well marked. The tongue was brown-red in affections of gastro enteritis. Mr. H. saw a case with Mr. Mercer in which the tongue had this appearance, the bowels were frequently opened, the fœces were of an oleaginous nature. He recommended bleeding, but the patient he believed died. Armstrong in his opinion gave the best diagnosis of these affections and laid down the best mode of treatment. Many diseases in this country resembled gastro enteritis. Mr. Twining's first case had bloody dejections which shewed in Mr. Hutchinson's opinion that it was connected with a dysenteric affection.

Dr. Goodeve was glad that this subject had been brought before the society by Mr. Twining. The disease was common in this country and more so among the natives than Europeans. The natives seldom had a fever without this affection, and this was the cause of the difficulty experienced in giving quinine to them. In several cases which had occurred to him the administration of quinine did harm. It was certainly against all practice to use violent purgatives, and he should like to know from gentlemen whose experience was greater than his, when to desist from giving purgatives.

Mr. Egerton concurred in opinion as to the importance of the subject before the meeting. A friend of his had grastro enteritis under which his patient grew fat, but died, dissection shewed it to be a case of gastro enteritis. He saw a young lady of 18, afflicted with an inflammatory affection of this nature; she was bled, leeched, and purged; on the seventh day she passed a substance like parchment. Mr. Egerton thought that quinine used in tertians was beneficial; but not so when used as a tonic.

Mr. Hutchinson thought bark with a little quinine was better than quinine daily. Mr. Twining thought quinine would be injurious when inflammation existed. Mr. Corbyn said that quinine, in cases of fever where the condition was contrary to that of an inflammatory nature, was highly efficacious. With respect to the use of purgatives he was guided by the tongue and alvine digestions. So long as the tongue was foul and loaded, and the dejections bad, he would never desist from giving purgatives.

The following are cases in which Magnetism and Galvanism were had recourse to, with an account of some novel experiments in Electro-Dynamics, by Robt. Tytler, Esq. M. D. which were next read.

The first case in which Dr. Tytler had recourse to magnetism was that of a Mussulman between 30 and 40 years of age. He was affected with violent acute pain in the muscles of the back and loins. Three shocks, in rapid succession, from the *magnetic wheel*, were passed from the loins to the upper part of the back; the patient declared himself relieved and the pain has not returned. The second case was that of an East Indian woman, about 30 years of age. She has been for several years affected with a paralysis of the thumb and fingers of the right hand. Shocks from the *magnetic wheel* were administered for a month, the stream being directed from the front of the biceps muscle to the wrist. She likewise twice or thrice received galvanic shocks. She can now sew and comb her hair, which she was incapable of doing when the magnetism was first had recourse to. The third case was that of a native writer affected with deafnes. He received shocks from the *magnetic wheel* three times a week, for about a fortnight. He likewise had one or two galvanic shocks. The hearing of the right ear, which was quite gone, is now in some degree restored, and he declares the ear to have become *burrah hulkah*, that is, much lightened or relieved. The above, Dr. Tytler believes, are the first cases which have been treated by galvanism in India.

To the above cases Dr. Tytler subjoins an account of two experiments in Electro-Dynamics performed by him. In the first Dr. Tytler states, that a charge of galvanism from a compound trough, containing fifty plates of zinc, and copper, and capable of giving a powerful shock to the human body, only moves the galvonometer a few degrees; whereas a small cylindrical trough, containing only two copper plates, and one of zinc, or a simple trough, moves the galvonometer many degrees, and is yet incapable of communicating a powerful shock to the human body.

In Dr. Tytler's second experiment, a small quantity of sulphuric acid being placed in a glass vessel, two copper wires were immers-

ed in the acid, and connected with the galvonometer. No effect was produced on the needle; but on adding water, so as to raise the temperature of the mixture, the magnetic needle instantly deflected three or four degrees. A piece of chalk was then added to the diluted sulphuric acid ; with the commencement of the effervescence the needle deflected nearly 45 degrees. On removal of the wires, the needle resumed its position, and again deflected, when the communication was restored. By this experiment, Dr. Tytler considers the identity of the chemical action produced by an acid, and an earth, with magetism to be fully established.

Some discussion took place between Messrs. Hutchinson, Twining, and Egerton, on the effects of Magnetism and Electricity on diseases; but the opinions were those universally entertained upon these subjects.

SELECTIONS.

CLINICAL SURGERY.

In presenting to our readers the first article of our selections for the present month, we trust, we do not in vain recommend to them the perusal of the first lecture of that celebrated Surgeon Mr. Liston, delivered at the Hospital, attached to the London university. In our last number we gave the first lecture of Graves on Physiology and Pathology ; we have received the second by the late arrivals, which will appear in our next number.

Introductory Lecture, delivered at the North London Hospital, (University of London), Dec. 20, 1834.

By Robert Liston, Esq. Surgeon to the Hospital, and Professor of Clinical Snrgery in the University.

After the very kind and flattering reception which I have met with on joining this great medical school, both from the professors engaged in communicating information at the University and also from you, Gentlemen, who are following out and perfecting yourselves in your profession in this hospital, I have every confidence that, on this occasion, indulgence will be extended to me, and that any deficiencies or imperfections in the matter or manner of my discourse, will be alike overlooked and forgiven. I had certainly contemplated appearing before you to commence my duties as surgeon and clinical lecturer,—such duties as I have for a long series of years performed, (with what approbation and success it does not become me to say) in a large and well-regulated public hospital. It may, after this statement, appear that I am not entitled to make an excuse for myself, or expect that it should be received by you if I make one. Between the time of my appointment to this chair, and my departure from the scene of my former labours for this great metropolis (constituting but a very short period), and since my arrival amongst you, I have had much more than sufficient business to occupy my time and attention. Everything appertaining to me, you may well believe,—books, papers, drawings, or specimens (to say nothing of the contents of my own cranium),—has been in a state of almost inextricable confusion. Before leaving Edinburgh, I had assembled together a few books and pamphlets from which I thought useful information regarding the history of clinical instruction might be gleaned. These had been mislaid, and were not forthcoming on my arrival in London. This note-book, however, containing a few memoranda, of little consequence, and not referring to the present subject, were separated from the parcel, and sent. My books may probably not come to hand for a long time after they might have been turned to acconnt.

I recollect this much of the history of clinical medicine, that it was mixed up and blended with that of medicine and surgery generally. One author, whose name has entirely escaped my memory, I think, sets out with Hippocrates, the father of physic, as the first clinical professor; and very properly too, for all those who from the earliest ages have observed disease closely, and taught any branch of the healing art efficiently (as did Hippocrates, Galen, Ætius, Paul of Egina, and all those who followed after), must have made constant reference to the symptoms of disease as they are observable at the bedside of the patient, and to the changes produced by, or occasioning, perverted action in the different organs and tissues composing the human body. The history of clinical medicine, as given by the author referred to, is thus, at best, but an abridgment from Le Clerc's, or some other author's history of the progress of medical science, and of those most distinguished as professors of the healing art in different ages. By clinical instruction is meant, that *practical* information relative to disease, which is communicated at the beside of those who are suffering under its attacks, by observation on the part of the pupil, and ex-

planation by the practitioner and teacher, of the signs, symptoms, causes, phenomena, and treatment, of various diseases; and, necessarily coupled with it, is the examination of the morbid appearances and the connexion of these with the previously observed circumstances. In point of fact, clinical lectures on medicine and surgery stand in the same relation to the systematic courses on the same subjects, delivered in the schools, as do demonstration, and practical instruction, and pursuits in anatomy and chemistry, corresponding courses of lectures. Κλινος signifies a bedpost, and clinical lectures are bedside, not curtain lectures, of which last, few of you here as yet know the scope and tendency.

Clinical instruction may be conveyed after two different fashions, both useful in their way. The first form of clinical instruction may be given *really* at the bedside of the patient, or immediately after the examination of the patient, in the wards, or the lobbies leading to them. This is the "ambulatory clinic," and is a most useful and valuable addition to the "walking" of an hospital. A young man, however extensive his theoretical knowledge may be, will find it insufficient and inapplicable at the bedside of the patient. And there are very few young physicians or surgeons who, at the commencement of their career, have not felt the truth of this remark. The pupil requires to be guided in his *walks*, or to have those objects which are of the greatest interest and importance to his future success pointed out and impressed upon him. He may otherwise prolong his peregrinations to an indefinite period, with little advantage. Even by listening to the inquiries made of the patient, as to his profession, habits of life, previous health, or diseased state,—the causes, symptoms, and progress of his malady, much may be gained; but when this is followed up by a few judicious hints and *remarks* as to what has passed, the nature of the case becomes plain, and an indelible impression is made on his mind. These observations, however, be it observed, require to be made *at the bedside*, with every deference to the feelings and fears of the patients, and with the utmost caution, as, not unfrequently, patients misunderstand what is expressed or meant. Many remarks as to the *probable result* ("prognosis," as it is called), the effects of remedies, the necessity that may arise for operative procedure, cannot be made with propriety in the hearing of those who are suffering under disease, and never would be attempted by any man of common sense, whether a professor or a pupil. The second form of clinical instruction consists in more extended, formal, and systematic discourses on disease, founded upon and illustrated by a case, or series of cases of the same kind, or bearing upon one another, *under treatment in the wards, and open to the observation of the pupil;* at least I have always thus understood the term "clinical." Essays on surgical or medical subjects are now and then composed at leisure, be it observed; *never delivered* to a class of pupils, and published under the name of "*Clinical* Lectures." And again, lectures appear to be sometimes given in this metropolis at an hospital, but not on the cases under the observation of the pupils of that hospital,—of those to whom the lecture is addressed; and then, again are published as "Clinical." It seems to be the fashion now to apply the term very indiscriminately, but to my apprehension the fashion is a very absurd one. It is a perfect prostitution of the term. Let those gentlemen give their lucubrations what other name they will,—"Essays," or "Discourses,," as may be, on particular subjects. Assuredly they are not deserving of the name of "Clinical," if they do not refer to cases under the observation of those to whom they are addressed. Each of the methods above spoken of shall be attentively pursued here, and I expect and trust that they may prove separately and conjointly advantageous to you.

In this country the methodical instruction in hospitals has not been so efficiently or regularly followed out as on the continent. What names of clinical professors in our department have we to oppose to those of Desault, of Pelletan, Scarpa, Boyer, Graefe, Delpech, and though last, not least, the illustrious Dupuytren? Names not more known or respected in Europe than over the whole world. The value and importance of this mode of acquiring correct views of the science is now better appreciated and understood in this country, and every year must lead to the more extensive spread of useful knowledge in this department.

In the prosecution of your studies here, the absolute necessity of obtaining an accurate history of each case presented before you, be it of disease or of injury, will soon be made apparent, and you will be shown the proper mode of setting about the inquiry. This is quite essential, in a great majority of cases to the formation of a correct *diagnosis* or discrimination of one disease or injury from another, and without that, no true or successful practice can follow. "Diagnosis is, in truth, one of the most important parts of surgical pathology; because it detects the character of diseases, prognosticates their termination, and points out the treatment to be adopted. An error in this respect often entails most lamentable consequences on the health or life of the

patient." I may be permitted in illustration to relate a case or two bearing on this point :—

About two years ago I was called in to reduce a suppposed luxation of the hip-joint, in a patient who was about twenty years of age. He had been employed the day previously in cleaning out a slaughter-house. He was standing on two blocks of wood : one of them slipped away from the other, and he fell with the limbs spread apart. He was unable to move after the accident. I found him lying on a mattress on the floor, it being impossible to move him into bed. The left leg was elongated considerably, and the hip flattened. He was very unwilling to allow the limb to be moved, and suffered great pain when any attempt was made to change its position. The head of the bone was supposed to be lodged in the foramen thyroideum. Looking to the manner in which the patient fell, it was very likely that that injury would have been the result. Although there was flattening of the hip, the remarkable depression in the situation of the trochanter, indicative of this form of dislocation, was wanting, and the abridgment of motion so remarkable in dislocation was not observable in this case. In pursuing the inquiries into the history of the case, I, with some trouble, discovered that for several months past he had complained of stiffness in the limb, and weariness at night. He walked rather lame, and felt as if that limb were a little longer than the other. From this it would appear that the case was one of disease of the hip, aggravated by the twisting of the affected apparatus of the joint, and not a luxation, as had been supposed. No doubt considerably greater elongation had supervened, as I have observed in similar cases, upon the accident. You may easily guess what would have followed the application of extension and counter extension, and the employment of great force which might have been required to remedy such an injury, as was supposed to have happened, in a young and muscular person. Even the injury, which had been inflicted by the fall, was attended with great suffering and much risk. Inflammation, suppuration, violent fever, and a fatal termination, in all probability, would have been the result of a false diagnosis and consequent malpractice. Rest, antiphlogistic means, and a long continued drain from the neighbourhood of the articulation in the above case, were recommended, and, so far as I know, the employment of those means was followed by a happy result.

Again I may refer you to injuries of the shoulder-joint, to show the necessity of a correct diagnosis being at once formed and acted upon. You may be called, perhaps, to a patient who has received an injury of the upper extremity ; he is labouring under great pain, much aggravated in any attempt at moving the shoulder-joint. The shoulder is found to be flattened if the injury be recent, and the limb elongated. The patient was not so much intoxicated or stunned by the fall, but that he recollects all about the nature of the accident. Before putting him to the pain of examination, it would be well to inquire into every circumstance connected with it. He will tell you, probably, that having had his arm entangled, having, perhaps, had his hand in the pocket, he was tripped up, and fell on the shoulder. The chances are, that there is no luxation, as the patient is probably at first led to believe, but that by the direct violence, the neck or the head of the humerus, or the articulating part of the scapula, has given way ; and thus you can form your diagnosis, and, upon that, your plan of cure, by an accurate and a much less painful examination than would have been necessary had you failed in obtaining the history of the case. Such cases are of common occurrence, and I have made the statement in general terms.

I could, if it were necessary, from my case books, particularize instances where from neglect of such inquiry and examination, patients have been treated for dislocations when labouring under fracture,—who have had the fragments of bone torn asunder again and again,—have endured the most dreadful tortures, and, if not disabled entirely, have had their recovery retarded, their health broken, and their occupations much interfered with by such proceedings. Again, cases of luxation have been treated as if fracture had occurred,—an equally awkward and unjustifiable mistake (fallen into only through gross ignorance and carelessness), and one leading to much suffering and permanent lameness. No language is too strong to express execration of such careless and heartless proceedings.

Error in diagnosis may also lead to the performance of surgical operations (if they can be so called when undertaken under such circumstances), in themselves dangerous to life, altogether unnecessary, and, as such, unwarrantable and cruel in the highest degree. Aneurysms have often been mistaken for abscesses, and openings have been made into them. I have seen more than one such case. Operations for aneurysm have been performed when abscess existed. Glandular swellings, to my knowledge, have been mistaken for hernia, and hernia for enlarged glands. From want of a proper diagnosis, and of that faculty which it is not very easy to acquire—"surgical tact"—cases in which the bladder has been cut into in the expectation of, but without finding, a stone, have been of too

common occurrence. Yet grosser blunders have been committed I fear from too great anxiety to perform what are called the "greater" operations. I beg to refer you to two such cases, published within the last twelve months; one of them is (if I recollect rightly) to be found in a late number of the *Edinburgh Medical and Surgical Journal*, where, from a mistaken diagnosis, an operation, at all times attended with great risk, even in the hands of the most expert—of those who are most accustomed to such work—was had recourse to,—the ligature of the subclavian. The tumour was not, as was supposed by the practitioner, an aneurysm, but one of a solid nature, arising from the bone. The death of the patient, from secondary hemorrhage, at no very long period after the operation, led to the discovery of the error. This took place in a very remote district—at the other end of the island.

But to come nearer home, I may instance a very similar case, in which, though the patient did not perish from the operation, yet her life was put in imminent jeopardy by it. I had seen this patient while passing through Aberdeen on my return from a professional visit, and after examining it, very fortunately hit upon the true nature of the case, and expressed my opinion accordingly; I say "fortunately," seeing that very great people who saw the case were of a different opinion. I must presume that the diagnosis was difficult, and that I happened to be right merely by chance. My opinion then was, as can be confirmed by those who were in attendance, that the tumour was one of a malignant nature, and involving the upper part of the femur. The patient was transferred to this city, "as nothing could be done for her in Scotland." There was some difference of opinion in regard to the nature of the case. Amongst those who were consulted here, one gentleman had decided that the tumour was an aneurysm, and to this opinion the others were brought to assent. In an account of the case published in one of the London medical journals, the tumour is represented to have had a distinct pulsation. At an early stage of the disease I could not discover the least either of pulsation or of whizzing noise. Under the supposition that this large tumour of the hip was an aneurysm of some one of the branches of the internal iliac, an operation was undertaken. The internal iliac, which it was the operator's object to reach, could not be secured, but in lieu of it, after more than one opening had been made into the cavity of the peritoneum, and the state of some of the chylopoietic and assistant chylopoietic viscera ascertained, the common iliac was surrounded by a ligature. The patient, strange to say, did not suffer, as might have been expected, from such a proceeding. She was, at no distant date from that of the operation, announced in some of the "journals to be quite cured, and was sent home, able to bear the motion of a carriage." The growth of the tumour may certainly have been in some measure retarded by this operation, but after her return the disease continued to gain ground. She now suffered the most dreadful agony, which the largest doses of opium that it was thought safe to administer, had very little effect in relieving. The patient at last succumbed beneath the malady, and, upon examination, the diagnosis which I had formed was found to be correct. I shall on a future occasion, show you a sketch of the swelling, and the state in which the vessels were found. The case has been published, with an explanation referring to a plate, but so far as I am aware, the plate itself has not as yet appeared. This deficiency, however, I can supply to you, by the kindness of my friend Dr. Dyce, of Aberdeen, who attended the patient both before and after her visit to London, and conducted the *post mortem* examination. In both of these cases, so far as my memory serves, the swelling followed upon a bruise; and this circumstance of itself ought to have excited doubts as to the existence of an aneurysmal tumour,—of a tumour arising from the yielding of a single vessel.

In forming what is called the "prognosis" of a case—and this, as already stated, will depend for its accuracy entirely upon a knowledge of what the disease is or is not, and in giving an opinion as to the probable result of any case—the greatest caution is to be observed. An opinion in regard to any case must be formed and expressed after a very careful examination into all the circumstances connected with it, and in drawing those conclusions you ought neither to be too confident nor too hasty. I caution you also against believing that any observations which you may make, are entirely new to others. Many more "discoveries" are made by those who are learning their profession, whether they learn it early or late in life, than by those who have had much experience in it. You must be prepared to make allowance for the caution of your seniors in the profession,—a caution which is only to be gained by long experience and patient investigation.

As concerns the *treatment* of cases I shall have frequent occasion to inculcate upon you what I have already done at considerable length in the ambulatory clinics, namely, the necessity in all cases of endeavouring to discover the immediate or proximate cause of the disease, and, in the first instance,—and that too, before employing

any treatment whatever, constitutional or local,—to remove that cause if possible. It does not always follow, as a matter of course, that upon the removal of the cause—the more especially if it have been long in operation—the effects disappear. Very frequently, however, they do so, and that rapidly. In every case the removal of the cause of a disease will render it more probable that the other means employed will take effect, and thus the cure will be expedited and rendered permanent. This is much more easy, as you can easily understand, in external than in internal diseases, and hence, in a great measure, arise the superiority and certainty of the one part of the science over the other. This precaution is too frequently neglected, and here I may again be permitted to relate a case or two in illustration.

The necessity for this precaution was very apparent in a case now under treatment in the hospital. The patient to whom I allude is in one of the upper wards,—a young female who laboured under a very painful inflammatory tumour of the neck. The tumour was rapidly increasing in size, and threatening to suppurate. The patient had a considerable degree of inflammatory fever; and constitutional means had been employed to subdue this. She had been salivated if I do not mistake. You must have observed the rapid amendment in this case, the speedy absorption of the tumour, and the subsidence of all constitutional disturbance immediately upon the removal of the cause, —a very palpable and obvious one,—a dead portion of one of the molares in the upper jaw. In this instance the removal of the cause was sufficient,—with very little local treatment,—merely fomentations,—to remove the whole of the mischief with amazing rapidity. This would not have been effected by mercury, or other general remedies, so far as my experience goes.

I here exhibit to you another tooth, which was the source of very great inconvenience to a young gentleman, a pupil at the Edinburgh Hospital. He applied to me, after having laboured for a very considerable time under swelling and ulceration of the throat. He had, like many other young men, some years previously, contracted a slight venereal affection. He had been treated in the common form, with mercurial medicines, probably unnecessarily. When his throat became affected, he applied to a medical man, who was inclined to attribute the whole of the malady to a venereal taint. The young man was subjected to all sorts of constitutional treatment; he first had doses of mercury given to him, and, after that, the symptoms not being in any way abated, he took sarsaparilla until he was sickened by it. Besides this, topical applications were made to his neck, which had also been leeched, and treated with counter irritation. I have received a copy of the notes of this case from the young gentleman, but, unfortunately, in the general confusion it has fallen aside. Upon application to me, I observed the throat to be relaxed and I saw that it was slightly ulcerated, and my attention was directed to the state of the molares. This portion of tooth was the remains of one of the dentes sapientiæ of the lower jaw, immediately in contact, as you are aware, with the soft palate. I advised its extraction. This, however, was delayed for some eight or ten days, the symptoms still continuing so severe as, occasionally, in damp weather, to confine the patient to the house. At last he took courage, and had the tooth extracted. I met him in the street, carrying it in his hand for me; and it is, as you may observe, a very beautiful specimen. At the extremity of the fang is observable one of those little sacs which, by their increase, often lead to much more serious consequences than had happened in this case. The cysts I allude to, I have no doubt, often lay the foundation of many of those dreadful diseases of the jaw which come afterwards to be removable only by severe operation—to the diseases named "ostea sarcoma" and "spina ventosa."

In this little jar is a preparation to which very little value might be attached, and it is really of no value, excepting a memorandum of a very interesting case. It has escaped, too, from its situation during its transmission here. Upon looking at the little body floating in the spirit, you may notice one or two hairs standing out from it. This is a part of the edge of an eyelid, with eyelashes growing irregularly from it, and this, as is often the case, gave rise to a great deal of distress, and to the loss of the very important organ in its neighbourhood. The patient from whom this was obtained was one of the nurses in the *Royal Infirmary* at Edinburgh. She had been placed by the matron under the charge of one of the clinical professors of medicine, for an inflammation of her eye. She was treated by this gentleman, and by one who succeeded him in the charge of the patients, very actively, both by local and constitutional means, as you must be prepared to admit. Blood was taken from the neighbourhood of the inflamed organ, by leeches and by scarifications; applications hot and cold, sedative and stimulant, were used, without any relief from the symptoms. The general treatment consisted in abstraction of blood from the arm, application of blisters behind the ear, and to the nape of the neck. I think the patient was cupped at least six

times on the temple, a practice, under any circumstances, very unjustifiable, seeing that from one incision in this situation, instead of six or eight, any quantity of blood can readily be obtained. Besides all this, internal medicines were exhibited, with no sparing hand, quinine and turpentine ; and, upon the failure of all these means, local and general, as is too frequently the case in the practice of those who do as they have seen others do before them, without thinking for themselves,—who do not look beyond the surface, and not even to that, it would appear,—the patient was put under a long and severe course of mercury. In this way her constitution was by no means improved, for the local disease every day gained ground, and at last, after three months' suffering, the poor woman was transferred to the surgical wards. I recognised the patient, as having been under my care formerly, and for a similar affection, which yielded to the removal of a few stray eyelashes. Even with the scar of this operation before them, the nature of the case was not suspected. This little bit of eyelid was removed, and, as would have been the case had it been done at an earlier period, all the symptoms were speedily abated. The cornea, however, was so altered in structure, that there is very little probability that the functions of the organ will ever be restored.

I will mention one other case in illustration of the position which I have laid down, —that of an old gentleman who had been under the treatment both of physicians and surgeons for the space of six years for a prolapsus of the rectum, and detained from his residence in the country, from his family and friends. During all that time large portions of the bowel fell down every time the canal was emptied, and sometimes this protrusion was reduced with difficulty. Even in walking along the streets, propalsus occurred, —sometimes irreducible, producing very great suffering, attended by profuse hemorrhage. This patient also laboured under some urinary complaints, but these had been attributed by the gentlemen under whose care he had been, to the affection of the lower part of the bowel, and thus overlooked. In this view I was not inclined to concur. Upon the introduction of a sound, more than one stone was discovered. The old gentleman, although about seventy years of age, had very great courage, and he immediately arranged his matters, and submitted to the operation on the following morning. Eighteen calculi were extracted. He recovered with speed, and forthwith this troublesome affection of the fundament left him. It is now five or six years since the operation was performed ; he possesses perfect health, and seems to enjoy himself as much as any one at his period of life.

Now, Gentlemen, I have still some further remarks to make regarding the principles which should guide us in the treatment of surgical diseases. I have to inculcate upon you the obligation you lie under to the public, to prepare yourselves, by close attention to the nature and progress of diseases, and their pathological appearances, for their judicious management. It shall be my anxious study to point out to you those means, both local and constitutional, by which disease may be checked in its earlier stages, and by which, even under unfavourable circumstances, the performance of surgical operations may be averted, or dispensed with entirely. I have also some few remarks to make to you on the subject of what is called the constitutional management of local diseases, on the folly and danger of a blind and indiscriminate adherence to theories, and a perseverance in some fashionable remedies and modes of treatment, but I now fear I shall encroach on my learned colleague Professor Elliotson's time of lecturing ; these remarks must accordingly be delayed until I shall have the pleasure of meeting you here again. After making these general remarks, in all probability I shall direct your attention to some cases of disease about the anus, a good many of which, and of an interesting character, have presented since the hospital was opened, cases of hemorrhoid, of condyloma, prolapsus, of fistula, one of new growth, also, a sort of warty excrescence embraced by the sphincter, and, from its position, occasioning great suffering, and giving rise to an ulcerated cavity within the verge of the anus. To these, and a case of traumatic tetanus, with some others of interest, I beg you to direct your attention in the mean time.—*Lancet, Dec.* 27, 1834.

EJECTION OF A STONE FROM THE RIGHT BRONCHUS, BY EMETICS.

To the Editor of The Lancet.

SIR,—Should the following uncommon circumstances be considered to possess sufficient professional interest, I have to request their insertion in your valuable Journal.

I am,
Sir,
Your obedient servant,
CHARLES J. H. RAY.

Tonbridge, Dec. 21, 1834.

Jonathan Bumpstead, a delicate-looking boy, ætat. 10, was on the 20th of August in perfect health. While rolling upon the grass that day, in sport, and having a stone in his

mouth, he attempted to call out, when the stone suddenly disappeared from the mouth, and produced by its new position an immediate sense of suffocation, succeeded by frequent and violent paroxysms of coughing, dyspnœa, perspirations, and complete inability to lie in the horizontal posture. Several practitioners were forthwith consulted, and aperients with other means were prescribed, in the hope of obtaining the passage of the stone, but without effecting that object, or in any way mitigating the distressing symptoms. I first saw him early in November, about twelve weeks after the occurrence of the accident, and feeling much interested in the case, from the preceding history, I was induced to pay attention to it, as it was then evident that his constitution could not long bear up against such continued suffering. He was much emaciated, had repeated fits of coughing, with copious frothy expectoration and dyspnœa; he was unable to run, or to walk fast, appeared much distressed in ascending the stairs, and could not lie in the horizontal posture; his pulse was small and frequent; tongue whitish; bowels regular; urine scanty and high-coloured; perspirations profuse. He complained much of thirst, and felt a disinclination for nourishment. On auscultating either side, the loaded mucous rattle so characteristic of sub-acute bronchitis was distinct; but in the right superior thoracic region a peculiar loud wheezing, as though caused by some uncommon obstruction, was evident. I marked the exact situation on his chest, with ink, where this peculiar sound appeared to originate, and on frequent subsequent explorations found it to be stationary. Considering the horizontal position of the body at the time of the stone passing from the mouth to have been favourable to its entering the tracheas with the inclination of that passage to the right side as it enters the chest, as also the increased size of the right bronchus when compared with the left, I felt satisfied that it must have taken that uncommon course, and was there producing the peculiar loud wheezing which I have described. I proposed a perseverance in the use of emetics, as alone likely to prove serviceable. This was willingly acceded to, and he commenced with the tartrate of antimony and ipecacuan, in full nauseating doses every other morning. Finding, however, that these produced much after excitement, I discontinued their use, and suggested the employment of the sulphate of zinc, which answered my intent equally well, without producing the same unpleasant consequence. This plan was persevered in every other morning, for nearly three weeks, when, after having taken a full dose attended with violent retching, he ejected the stone, to the comfort and delight of himself and his friends, who instantly apprized me of the circumstance, bringing the stone with them, which I have now in my possession. In size and shape it much resembles a small date stone, and weighs half a drachm. The following day, on applying the stethoscope over my *ink mark*, I could discover no obstruction as before the ejection of the stone, nor any variation from the opposed side. He complained of considerable heat in the chest after the stone was removed, but he can now lie in the horizontal posture, run up-stairs without inconvenience, has little or no cough or expectoration, and appears to be rapidly convalescing, after about 16 weeks of severe suffering.—*Lancet, Dec* 27, 1834.

ON HEMORRHOIDS AND PROLAPSUS OF THE RECTUM.

CASE 1. *Severe Pains experienced only during Coition—Disease of the Uterus suspected—Cure.*

It is by no means an unfrequent occurrence in hospital practice to find women who are labouring under hæmorrhoidal affections, and who are ignorant all the while that these very affections are merely secondary, and are dependent upon some disease of the uterus, or of the vagina. On the other hand, experienced surgeons are well aware, that a uterine or vaginal disease may be most perplexingly simulated by internal hæmorrhoids as is proved by the following case:—

A woman, 23 years of age, complained that she had always suffered severe pain during coition. The husband, finding that month after month passed away, and yet that things were nowise better, became discontented and suspicious of the affections of his wife; he applied to a midwife to exmaine her; but she could not discover any cause why the lady should be more unfortunate than others of her sex. In consequence of this a physician was applied to, and when he was informed that the pains were experienced only during connexion, he proposed a manual examination, and thus ascertained, that through the posterior wall of the vagina several tuberculous masses might be felt. The patient now confessed that for a length of time she had occasionally experienced annoyance at stool, and that blood was sometimes discharged with the evacuations: that this hæmorrhage usually afforded her considerable relief, so that she could then permit her husband's approaches with less suffering.

By appropriate treatment, directed chiefly to the relief of the rectum, this woman got rid of all her distress, and soon afterwards be-

came pregnant.—*Medico-Chirurgical Review, Jan.* 1835.

SOLANINE IN POTATOES—POISONING FROM MUSHROOMS.

Several accidents among the cattle which had been fed with the residue of the potatoes (in a state of germination) used in the preparation of brandy, having occurred lately at Brunswick, M. Otto was induced to perform some experiments.

He treated the germs with water, slightly acidulated with sulphuric acid—then added the acetate of lead to precipitate the acid, and filtered the liquor; to this liquor lime was added, and the precipitate thus obtained was treated with boiling alcohol, which dissolves the solanine; the alcaloid may then be purified by repeated solutions and crystallizations. One grain of the solanine killed a rabbit in six hours—and three grains a dog in nine hours.

In the same periodical we observe the history of four individuals having died from eating mushrooms. The species of agaricus which had eaten were ascertained by M. Brogniart to be a grammapodius—a. infundibuliformis—a. fusipes, and a. pectinaceus of Bulliard (Emeticus, of Persoon, and Integer, of Sowerby.)

The three first species are usually considered innocuous; but the last is very poisonous. It is an interesting problem in organic chemistry, to discover the noxious principle of the agarici; hitherto, it has escaped the tests of the analyst.—*Journal de Chimie.*

ON THE TREATMENT OF ERECTILE TUMOURS AND PARTICULARLY ON THEIR TREATMENT WITH CAUSTIC;—BY CLAUDIUS TARRAL. M D.

In the first part of a memoir on this subject by M. CLAUDIUS TARRAL, an excellent resumé of the history of erectile tumours, and the various modes of treatment employed for their extirpation, is to be found in the *Archives Générales,* Sept. and Oct. 1834. He passes successively in review compression, refrigerants, ligature of the tumour or its vessels, excision, the application of various agents which produce inflammation, and finally, the mixed method. Passing over these details, which, although interesting, the length of the memoir prevents us from translating, we come to the most novel part, viz. the cauterization of erectile tumours by caustic:

The applicability of this treatment has been variously estimated by surgeons. Boyer and Begin condemn caustics altogether. M. Sanson, in his edition of Sabatier, regards it as acting too slowly and uncertainly, notwithstanding the experience of Wardrop for employing it in preference to more active measures. Velpeau expresses himself more energetically against the use of caustics, cautery, and similar means, which, says he, expose to severe accidents, such as hemorrhage, more rapid growth of the tumour, great loss of substance, disfiguring cicatrices, &c.

In answer to these objections M. Tarral refers to experience, and shows by an analysis of the cases which have been treated by caustic, that surgeons have pronounced too hastily against this mode of treatment.

Callisen appears to have been the first who proposed cauterizing an erectile tumour. "Nævi parum prominentes caustico admoto consumuntur &c.; sed majores nævi ferro exscandi sunt &c." (p. 204). However, Mr. Wardrop has the merit of having pushed this practice to its utmost extent, and of having directed the attention of surgeons to its true value and efficacy. Mr. Wardrop has operated on a great number of nævi in this manner, and has, we believe, constantly been successful, without giving rise to the great pain, hemorrhage, or deformity, so much dreaded by the French surgeons. Dr. Lee and Mr. Higginbottom of Norwich have been equally successful with the caustic. Finally, M. Tarral publishes two cases of destruction of erectile tumours, one of which he operated upon in London; the other was that of a small tumour situated below the urethra, and prolonged upward into the vagina; the centre of the tumour was rubbed with the caustic potass, and he repeated its application a few days after; the tumour was nearly completely destroyed, when it was discovered that the patient was pregnant (four months and half gone); the application of the caustic was therefore diminished, and the treatment deferred to a future opportunity.

From a consideration of the various cases which M. Tarral has examined, and he has certainly taken a most complete view of his subject, he draws the following considerations:—

1st. Erectile tumours of every size and nature may be completely destroyed, and without danger by caustics.

2nd. The caustic is easily applied and managed, and does not frighten the patient.

3rd. It is applicable to every region of the body, and is thus preferable to every other method.

4th. It is of the utmost importance not to confound with erectile tumours, either fungous hæmatodes or encephaloid cancer.—*Lancet. Nov.* 15, 1834.

PRESENT SYSTEM OF MEDICAL EDUCATION, AND THE ARRANGEMENT OF THE MEDICAL PROFESSION, IN THE AUSTRIAN STATES.

The following system of Medical education and Polity, acted on in the Austrian Empire, may be acceptable to those of our readers who are occupied in planning a Code of Medical education and Police organization for India.

The laws by which the profession in Austria is governed, were enacted in the reigns of Maria Theresa, of Joseph II., and of the Emperor Francis I. The object is the improvement of medical education in the schools, the supplying of suitable practitioners for the people, and the regulation of the *pharmaciens*, who alone are permitted to deal in drugs and medicines. They further contain clauses of great severity for the checking of charlatanism; and in order that the magistrates may be fully acquainted with every thing relating to hygiene and medical police, appointments are provided in the several districts for a body of well-instructed and experienced medical persons, specially entrusted with this duty.

I. SYSTEM OF EDUCATION.

There is no distinction made, in the Austrian universities, between the education of physicians and that of surgeons. The students destined for either pursuit must attend the course of both branches of the healing art, and not until they have completed their curriculum are they allowed to choose which they shall practice: but they may practice both if they choose, and be found properly qualified.

The qualification for a doctor of medicine or surgery, consists in a *five years' attendance of lectures in some national university;* the three first years being devoted to the study of the collateral sciences and the theoretical parts of medicine, and the last two being employed in special therapeutics and practice, at the bedside of the patient. The following is the order in which the several branches are studied:—

First Year ...	1st Semestre.	A general introductory course of medicine and surgery. A course of anatomy. A course of special natural history.
	2d Semestre.	The courses of anatomy and natural history repeated. A course of botany.
Second Year...	1st Semestre.	Anatomy and physiology of a more advanced character. General chemistry.
	2d Semestre.	Anatomy and physiology continued. Pharmacy and animal chemistry.
Third Year	1st Semestre.	1. General pathology (etiology, semeiology, and general therapeutics.) 2. Materia medica and chirurgica, dietetics, and art of prescribing. 3. Theoretical surgery (general and special pathology of surgical disorders.) Midwifery.
	2d Semestre.	Courses 1, 2, 3, preceding, continued. Bandages and surgical instruments, from June till the end of the medical year.
Fourth Year ...	1st Semestre.	1. Special therapeutics of internal maladies. 2. Internal clinique.
	2d Semestre.	1 and 2 preceding continued. Veterinary medicine.
Fifth Year.....	1st Semestre.	1 and 2 of preceding year continued. Forensic medicine.
	2d Semestre.	1 and 2 continued. Medical police.

(To be continued.)

CORRESPONDENCE.

We find that if we are to conduct our reviews with freedom without granting our assent to principles which do not appear to us satisfactorily established, and comment upon public institutions in the manner we have commenced, we must open our columns for discussion. For it is but fair that all parties should be heard. We shall therefore allot a part of our periodical to discussions of this nature which we shall call CORRESPONDENCE.

The following letter has just been received from Dr. O'Shaughnessy, with a request that it should be inserted without delay. In order to comply with the Doctor's wishes we have been obliged to stop our selections without finishing the last article which will be continued in the next number.

Patna, 11th July, 1835.

Dear Sir,—I have just seen your Reviewer's notice of my paper on the blood published in the last part of the transactions of the Medical and Physical Society of Calcutta.

I must decline entering into a controversy regarding the existence of the supposed new substance, as the question can scarcely be decided without a reference to the "home authorities. But while I cheerfully leave the chemical points at issue to the judgment of other and abler critics, you will permit me to assure you that I am most unjustly accused of undue haste in the performance of the experiments on which my paper is founded. The date and context of the article shew that the experiments were commenced in April and their results transmitted to the society in July 1834. I may add that they were assiduously repeated and varied from July to the end of October when I corrected the proofs at Dr. Goodeve's at Midnapore. Thus nearly seven months were devoted to the enquiry and to careful deliberation and consultation of the best authorities on the subject.

Again, I find a list of eleven authors arranged so as to *appear* to agree in contradicting my statements regarding the constitution of the blood in the malignant cholera.* Your readers will perhaps participate in my surprise at this feature of the Review on perusal of the subjoined facts. The highest of the authorities cited, M. M. Rose and Witflock, agree with me as closely as possible, † Dr. Thomson's experiments also concide with mine, tho' to a casual or superficially informed reader they may seem to differ. The cause of this apparent discrepancy is, 'that Dr. Thomson and I used different modes of numerical annotation. He gave the quantities of Albumen, salts and colouring matter *together*, I gave them *separately*; but the *items* of my analysis when added up agree with the *total* of his, as nearly as can ever be the case when the subject of analysis is in itself ever varying in the amount of its constituent ingredients.*

M. M. Rayer and Lassaigne also agree with me as far as I have gone in the enquiry on the blood. They have made some very interesting additional experiments which I have had no opportunity of repeating, but which I believe to be perfectly correct. The lamented Dr. Christie is also quoted, although he made *no* experiments on the *blood* and confined his researches to a very limited number of examinations of the dejections, and even here his results correspond with mine in the most important particulars.† As to Dr. Clanny and M. Hermann and their fanciful theories about "free carbon" and "free acetic acid" no chemist regards them with the slightest consideration. What Dr. Kirk, M. M. Gueneau, and Baruel and Dr. Davy may have written I do not know, but after the epitome I have just given, your readers will of course be cautious as to the degree of faith to be reposed in the reviewer's statements. Of *eleven* authorities *five* are with me in every essential point. With *two* I should be very sorry not to differ. The remaining four will probably be found to rank with either of the preceding groupes.

As a proof that I am not called on to enter into a chemical discussion with your Reviewer, I need only refer to two remarks of his, which sufficiently denote his total want of *practical* knowledge of the subject on which he writes. He asks me, why I did not use "corrosive sublimate" as a test to "decide" whether the alleged new substance was or was not composed or mixed with albumen. Let me assure him, that notwithstanding the vague statements in some theoretical works, corrosive sublimate causes similar precipitates with such a multitude of organic proximate principles, that no analyst who understands his business places the least confidence in that agent in the examination of mixed animal fluids. Again he says, "I have failed to give the data" by which from the analysis of the serum, the amount of albumen associated with the coloring matter can be precisely computed. It was no more necessary to do so than it would be to append the "rule of three" to every financial or arithmetical table. But if your Reviewer really needs the assistance of these data, he will find them in M. Lecanu's prize essay on the blood (Journal de Pharmacie, September 1831) in

* M. M. Rose, Witflock, Thomson, Rayer, Lassaigne, Christie, Hermann, Clanny, Gueneau, Baruel, and Davy.

† See Gazette Medicale, 7th January, 1832.

* See my "remarks on Dr. Thomson's investigations" *Lancet*, April 1832, also the observations of Mr. Prater in his work on the blood published in the same year.

† See Dr. Christie's work on the Pathology and Treatment of Cholera and diseases of mucous membranes.

the appendix to my report on the chemical pathology of cholera.

As your Reviewer, lastly, has been so candid and unceremonious in his dealings towards me, perhaps he will excuse me for offering him in return a little advice which is solely dictated by an anxiety for his reputation and success exactly similar to that which he professes for mine. Ere he writes again on the blood he would derive much benefit from a perusal of Lecanu's essay, and a work by M. Denis (Recherches sur le sang humain) published in Paris in 1829. A few practical experiments too in his excellent laboratory, would enable him to discuss these topics, not with more confidence, but certainly with maturer judgment.

I am, dear Sir,
Yours sincerely,
W. B. O'Shaughnessy.
Assistant Surgeon.

In our review of Dr. O'Shaughnessy's paper we attempted to prove that he had failed to discover a new principle (which he calls sub-rubrine) in the blood. In his reply Dr. O'S. has declined entering into a controversy with us on the existence of the supposed new substance, and has left the question to the judgment of other and abler critics.

"Permit me to assure you" says he "that I am most unjustly accused of undue haste in the performance of the experiments on which my paper is founded."

As regards the justice of our conclusions in this respect we quote Dr. O'Shaughnessy's own words from the article we reviewed. "Being pressed for time I adopted a mode of analysis calculated to afford more expeditious results." Now we really do not know what is the literal interpretation of haste if the foregoing is not. It is acknowledged by all Chemists who have made experiments on the blood, that it is impossible to arrive at any accurate knowledge of its elements without conducting the analysis with the most scrupulous exactness. We have not, we are sure, *unfairly* judged Dr. O'Shaughnessy's experiment to have been performed in haste when he himself declares what amounts to the same thing: in this instance we have simply echoed his sentiments in words different from those he employs in conveying them. We had thought that this apology of haste was the best we could offer for Dr. O'Shaugnessy's obvious failure to prove the discovery of a new principle in the blood—a discovery so doubtful in his own mind that he believed his own future "*researches*" might "*possibly*" "*derange*" some of the "*conclusions*" at which he had arrived. He gives us other reasons which led him to the conclusion that "*to complete the history of this remarkable substance a minute ultimate analysis is peremptorily required.*" But the following observations shew still more fully the cause we had for expressing our sorrow that Dr. O'Shaughnessy published his paper when the principle he endeavoured to establish had been so imperfectly examined. "*I regret to say*" says the Doctor "*that I do not possess the necessary apparatus, neither can I in this remote situation attempt the construction of one on which I could rely.*" Now this letter is dated Gya Behar 23d June, 1834, and his letter was read at the Society's meeting, July 5th, 1835.

Dr. O'Shaughnessy goes on to say that we have "arranged a list of eleven authors so as to appear to contradict his statement." We merely observed that we thought the Doctor must have been aware that the result of the experiments made by those Chemists differed from his, as they did from one another: but the Doctor avers that those of M. M. Rose, Witflock, Thomson, M. M. Rayer and Lassaigne agree with his. It is true in some particulars they do, but in others they differ. Rayer says that in the blood in Cholera "the serum is less alkaline;" Dr. O'Shaughnessy maintains it is nearly or *intirely* deficient in its alkaline ingredients, and Dr. Thomson states, salts in cholera blood to be as 1 : 19; when in healthy blood it is as 1 : 30. Here then is a difference. Lassaigne, in his examination of choleric blood, found it to contain only a fourteenth of the usual quantity of fibrine; but Dr. O'Shaughnessy says that it is only in the last stage of cholera any alteration of the blood takes place. Dr. Thomson states, fibrine

of choleric blood is as 66 : 12 ; when in healthy blood it is as 78 : 39. Dr. O'Shaughnessy says "Dr. Thomson's experiments also coincide with mine, tho' to a casual or superficially informed reader they may seem to differ. The cause of this apparent discrepancy is, 'that Dr. Thomson and I used different modes of numerical annotation. He gave the quantities of albumen, salts, and colouring matter *together*; I gave them *separately*." In a paper we have before us the particulars of Dr. Thomson's experiments are given as follows :

	Cholera blood.	Healthy blood.
Albumen,	4. 85	8. 47
Fibrine,	0. 38	4. 45
Colouring matter with Albumen,	27. 45	7. 39
Salts,	1. 19	1. 30
Water,	66. 12	78. 39

Dr. O'Shaughnessy has referred us to his remarks on Dr. Thomson's investigation in the *Lancet* for April 1832. We require no other evidence than those very remarks to confirm the accuracy of our observations. Our object in stating these differences, in the results of experiments made by these Chemists, was not to shew that they were all opposed to Dr. O'Shaughnessy's; but to point out that this disagreement should induce caution ere opinions were received which were to decide the laws that govern the composition and decomposition of substances, and the practical processes by which the constituent parts of component substances are discovered.

What does Dr. O'Shaughnessy mean by our "Reviewer?" We assure him that we employ no reviewer. We conduct our own editorials and reviews, without any assistance whatever. Dr. O'Shaughnessy adds that we are void of practical knowledge. It is true we have been 21 years in India, and although we are not like fresh students from a chemical laboratory, it does not follow that we are ignorant of the progress of chemical science and of the common experiments upon the blood. The analysis of animal fluids were carried on with an astonishing degree of accuracy and zeal, by Gaubius, Dumas, Butt, Fourcroy, Vauquelin, Thomson, Cullen, Berzelius and others, long before Dr. O'Shaughnessy was born. Our young Physician has therefore been labouring after discoveries in a fluid, the enquiries in which have occupied years of laborious research of the most practical chemists ever known ; and had we time and space we would submit for his instruction the able experiments performed by Berzelius, by which that chemist obtained a deposit of colouring matter, and thus add to the information we gave him in our review. John Hunter actually describes the result of an experiment, which Dr. O'Shaughnessy, seeing for the *first time* in the course of his analysis, imagines it to be new, and publishes it for the information of such as we are supposed to be—"unskilled in the pursuits of practical analysis."

"As a proof," says Dr. O'Shaughnessy, "that I am not called on to enter into a chemical discussion with your Reviewer, I need only refer to two remarks of his, which sufficienctly denote his total want of *practical* knowledge of the subject on which he writes. He asks me, why I did not use 'corrosive sublimate' as a test to 'decide' whether the alleged new substance was or was not composed of or mixed with albumen. Let me assure him, that notwithstanding the vague statements in some theoretical works, corrosive sublimate causes similar precipitates with such a multitude of organic proximate principles, that no analyst who understands his business places the least confidence in such agent in the examination of mixed animal fluids."

Now let us see what Bostock, who is not so unskilled in practical analysis as we are, says. "Of these there are three, albumen, * *. The distinguishing operations of the first are its being coagulable by heat and by the oxymuriate of mercury." But as few of our readers are without Ure's Chemical Dictionary; if they refer to "Albumen" they will find the following. "According to Dr. Bostock, a drop of saturated solution of corrosive sublimate, let fall into water containing 2000 of albu-

men, occasions a milkiness and curdy precipitate. On "adding a slight excess of the mercurial solution to the albuminous liquid and applying heat the precipitate which falls, being dried, contains in every 7th part 5 of albumen. *Hence that salt is the most delicate test of this animal product.*"

But perhaps the foregoing testimony will not be sufficient to satisfy Dr. O'Shaughnessy: let us see what Brande says.

"There is a test of the presence of albumen, corrosive sublimate, which detects it in very minute quantities, and I shall show that a very dilute solution of it will produce a cloudy precipitate of albumen from a large quantity of water. Upon this principle it is, that albumen has been recommended in cases in which corrosive sublimate has been taken as a poison, and there is no doubt it must be very useful." We are now to be told we suppose that neither Bostock nor Brande, as analysts, understand their business.

We are sorry to have been compelled to go to this length. We have seen enough of Dr. O'Shaughnessy's writings to be convinced that for so young a Physician he is a distinguished, indefatigable, and zealous labourer in chemical science, and we should like to see his merits duly estimated in the proper quarter, and rewarded: but his knowledge of those who have preceded him in this branch of medical science is not very extensive, and therefore every result which he discovers in his experiments appears to him as new, and he thinks it must also certainly be new to others. But we again warn him that unless he uses more caution and less speed, he will be betrayed into many errors in the course of his professional career, which we trust may be as brilliant as it promises in one so zealous and aspiring.

MEDICAL COLLEGE.

To the Editor of the India Journal of Medical Science.

Sir,—I have been very much surprised on reading the following paragraph in your Editorial remarks on the Calcutta Medical College:—

"Another important defect which we are sorry to observe in this College was the absence, from Mr. Bramley's class, of all others except the natives. In this country where there are so few offsprings of European parents, we cannot but look upon such exclusion and invidious distinction as very unadvisable. The intercourse between the natives of India and Europeans ought by all means to be encouraged. The former would then imbibe the energetic and aspiring spirit of the latter, and be largely benefited by the interchange of sentiments and opinions."

Is it true, Mr. Editor, as you give out to the public, that all other classes except the natives are not admitted to the Medical College, because an invidious distinction has been made between them and the natives? Is it true that any boy, whether he be a Mahomedan, an East Indian, or a European by birth, has been refused admission into the College on the score of his *birth* and *parentage*? Nay is it not just and fair to admit only such boys into the College as are capable of understanding English and Bengali, or English and Hindusthani? and can you affirm that any East Indian, or European, who applied for admission, was refused being admitted, although he possessed the necessary qualifications! Where then, I ask, is the *invidious distinction* which you look upon as "very unadvisable?" Surely sir, it was very unadvisable for you to have said that, no other class of natives was admitted into the College because there existed an invidious distinction. I am personally acquainted with one of the pupils of the Medical College, named James Pote, who is born of an East Indian father and a Mahomedan mother. And does this prove that an East Indian or a Mahomedan, &c. is not allowed to enter the College on the score of his birth.

Another point:—You observe, "it is our opinion that the plan on which the College appears at present to be based is radically defective." I wish to know, sir, some of the *radical defects!* of the plan on which the College at present stands. As to the necessity of more professors I of course agree with you; and I believe that perhaps more professors will be appointed so soon as the College is removed to its destined place, and a *regular* course of lectures begun. But I wish to know what other defects there is in the plan which you call radically defective.—I pause for a reply,

And am your's, &c.

AN IMPARTIAL OBSERVER.

Calcutta, 9th July, 1835.

P. S.—I believe that no fixed plan of instruction has yet been adopted in the Medical College. The lectures now delivered are merely to be considered as a *preparatory course*.

A. I. O.

In reply to queries put to us in the above communication, we must observe it will be found, that it is explicitly stated in the General Order establishing the New College, that it is to be '*formed for the instruction of a certain number of Native youths.*" Secondly, Mr. Bramley unequivocally avows in his inaugural lecture that his class is to be

"*composed of Asiatics*" and that "*the medium of instruction was foreign to them*" and thirdly, on the occasion when the lecture alluded to was delivered we did not observe a single youth clad in the European dress, or one who appeared to be of European descent. We are, however, glad to learn from our correspondent that there is one of that class.

We have since made enquiries of Mr. Bramley himself on the very point, who has assured us that not one East Indian has applied to him for admission; but what is exceedingly satisfactory is that he stated he would be happy to enroll their names among the candidates if they should apply, and that in fact he would consider them as of the country. Europeans however, he informs us, are not admissible.

We are also glad to learn from "*An Impartial Observer*" who, we conclude, is well acquainted with the system of improvement about to be adopted, that the principal ground on which we considered the College to be radically defective, viz. the want of more Professors was about to be removed. We are persuaded that the talented and zealous Superintendent of the College will do his utmost to make the system of instruction effective, and that he has an able and liberal supporter in his coadjutor Dr. Goodeve.

Our journal has already developed the great talents which exist among our brethren in the Mofussil, and we trust an opportunity now offers for their employment.

MISCELLANEOUS INTELLIGENCE.

MEDICAL, MILITARY, AND ORPHAN FUNDS. —We were glad to find at a recent meeting of the Members of the Committee of the Medical fund, that a resolution was passed proposing to the subscribers to allow the amount of subscriptions already collected to remain in the Government Treasury at 4 per cent, pending the reference to the Court of Directors for sanction for six annuitants instead of three. We say we were glad to learn this decision, because we are satisfied that the Medical, as it has been recently shewn by Mr. Curnin himself, can never be incorporated with the Military fund. The difference is so great between the actual position and prospects of the Medical and the Military services that the interests of both can never be amalgamated. By paying a donation of fifteen thousand rupees a subscriber to the medical fund instantly becomes entitled to 300 per annum; but according to Mr. Curnin's plan, a subscriber must pay Rs. 20,582 for £164. It may be urged against us that on Mr. Curnin's plan there is no limit to numbers; whence it is inferred that more would retire: but we are satisfied that any member of our service disposed to accept an annuity on Mr. C.'s plan would also retire on his 26,000 rupees; for there is no prospective benefit to accrue to himself, but an obvious loss to his family on paying down such a sum.

Compare the small monthly contributions and premiums of the medical fund, with the large sums required by the scale laid down by Mr. Curnin, and let the members consider, that the 15,000 rupees as donation is not required to be paid down by the regulations of the medical fund, but may be deducted from the amount of annuity: no such provision is made in Curnin's plan.

Up to October last the fund had realized in the Treasury Rs. 57,689 12 8 during part of 1834 the subscription of one month amounted to Rs. 37,635; so that to the 1st of the current month the funds had realized 100,000 rupees at least, which will enable the committee to tender (depositing 15,000 rupees for each) seven annuities the moment the Court of Directors' answer arrives. When that is received, we are satisfied that the whole medical service will subscribe; for we have not a member in the service who would allow of his own advancement to the higher grades without himself affording assistance by subscribing for that advancement, and when the whole of the medical service subscribes, our means will be ample. Such is the confidence at present in the stability of the medical fund, that ten is the utmost of the subscribers who have seceded since its institution.

Now let these facts speak for themselves, and induce medical men to adhere to a plan which has not been hastily got up, but adopted after much toil and labour, and the strictest scrutiny into every point of importance, first by the Committee at Agra and afterwards by the committee at the Presidency. We would therefore earnestly recommend the members of the fund to continue their monthly subscriptions. We should indeed be glad to see the widows' and orphan funds incorporated with the medical fund as it is at Madras. When we find the direction of the Military fund here earnestly recommending the virtual abrogation of a fundamental rule, and see, as we have seen, mismanagement of the Military Orphan funds, it is high time that medical men should join themselves into that bond of indissoluble union and look more closely after certain and permanent provision for their widows and orphans.

Military Fund. We are glad to find that the following proposition by Messrs. Pearson and Grant has been adopted by the Directors of the fund, "*that in all cases of contemplated change or addition of rules, the propositions decided upon by the directors for submission to subscribers be inserted in each of the Calcutta daily papers and Calcutta Gazette once a week for six weeks previous to their being put to the vote.*" Now it is obvious this rule will lead to a discussion as to the legality or utility of instituting new or amending old rules, or raising subscriptions, and thus promote the welfare of the fund. Messrs. Grant and Pearson are entitled to the thanks of every subscriber to the fund for bringing forward this proposition. Mr. Pearson also informs us that they have sent a similar proposition to the Managers of the orphan fund; but we fear in that quarter, such has been the disregard for the rule which directs the publication of any alteration in the rules, that there will be a great struggle ere the result of their proceedings on the proposition will be permitted to see light; we shall however rejoice to find we are in error.

Since the foregoing went to press we have heard that the proposition is carried with the exception that the publication is to appear only in the *Courier*. Now we should like to know the cause of this limit to advertisement to one paper when its object is general information.

Medical College.—We beg to call the attention of the East Indian community to the opportunity which now offers for enrolling the names of their children on the list of candidates for receiving medical instruction. The qualifications necessary for admission is a good education, of which a knowledge of the Latin language should form a part. Young men, who get their certificates of qualification at this College, will be able to obtain the situations of Surgeons to ships in the country service, and also be enabled to practice in any part of India, as well as other countries.

G. Evans, Esquire.—We have great pleasure in stating that Mr. Evans, Surgeon, Kyd-Street, Chowringhee, has been appointed Curator to the Medical College on a salary of 200 rupees per mensem. The Curator's is a very important department in taking charge of all preparations and other articles explanatory of the animal economy, of diseases, and of the principles of surgery, of all printed books, manuscripts, paintings, drawings, engravings and surgical instruments, &c. &c. We have alluded to the above duties, because we hear that Mr. Evans' appointment is to continue only until a pupil is found efficient to succeed him. To inspire Mr. Evans with zeal and pleasure in the discharge of the duties of his vocation we would suggest that his appointment be made permanent.

Oriental Baths.—We beg to call the attention of our readers to a notice among the advertisements in this number of Mr. Wetherill's Oriental Baths which we have ourselves visited. Whether we consider the ingenuity of their construction or the comfort or convenience they afford, these baths are highly creditable to Mr. Wetherill. In a future number it is our intention to call the attention of the Indian public to the utility of vapour baths; but in the mean time we beg strongly to recommend those of Mr. Wetherill's, and trust he will meet that support which he so justly merits.

William Pitt Muston, Esquire.—We hear it is the intention of Mr. Muston to proceed to England in one of the first ships of the season.

Assistant Surgeon F. H. Fisher.—Assistant Surgeon Fisher of this establishment died at Quebec, Lower Canada, on the 15th of January last.

Work on the Statistics of Kemaon.—We are glad to learn that Mr. McClelland is about to publish "with coloured plates, a work on the statistics of Kemaon, embracing an account of the rocks, minerals, and mines, organic fossils, waters, population, wild animals, birds, and insects of the province, together with observations on the goitre, on earthquakes, and climatology. The whole, including a Geological Map and Section of the district, with various other drawings."

Baron Dupuytren.—We regret to state that the celebrated Chief Surgeon of the Hôtel Dieu, Baron Dupúytren, died at Paris on the 8th of February last, in the

56th year of his age. Such are the profits attached to the situations of distinguished Professors in France that Dupúytren died worth 300,000£ sterling. He has, it is said, bequeathed 8000£ either to endow a Professorship of Pathological Anatomy, or to found an asylum for twelve aged and reduced physicians.

Discovery.—We observe by the recent journals that on the 6th March 1834, Professor Franchina took a dead body into the Anatomical Theatre, and including the viscera embalmed it: two months afterwards it was examined in the presence of several hundred persons, when it was found that the features of the person had undergone no alteration—the body was perfectly flexible—the flesh had the natural hue of death: the viscera were well preserved especially the lungs: the process by which this embalming was effected is not however promulgated. Baron Larrey employed for this purpose Corrosive sublimate, and Dr. Nurnburger laid a body in a solution of corrosive sublimate after the battle of Eylaw, which was carried to Brundenburgh in a state of perfect preservation. If such a process should succeed in every instance, it is obvious that the discovery is important to students of Anatomy.

TO SUBSCRIBERS.

The paper which we had chosen for the July Number of our Journal was thin, because being pressed to insert valuable matter, we were anxious that our subscribers should suffer as little as possible from post office regulations, which allow only 6¼ Sicca weight during the rains for a single number. So determined were we to be within the prescribed weight that we weighed with our own hands the first number prepared for dâk, and we were glad to find that it was, as we supposed, within the prescribed weight; but to our astonishment we learnt from our sircar that at the Post office the journal was found above the weight. We accordingly addressed the Post-master general upon the subject, and were told in reply, that the Post office was especially provided from the mint with weights, that they were precisely sicca weights, without reference to the rupee. The new rupee (which by the bye is now very old in appearance from wear and tear) happens however to be one anna and a fraction in excess of the actual sicca weight tho' designated the sicca, and if the journal side in the scales go down in the least, instead of four annas, the dâk charge is not only instantly doubled but trebled, viz. to twelve annas. This then is the cause why our subscribers had to pay a higher than the usual rate of postage for the July number.

To point out the impediment which this high rate of postage throws in the way of the spread of medical knowledge we quote the following passage from a letter to the address of our predecessors from Baroda. "*I need scarcely say that your journal in this part of India is received with the satisfaction which so noble an effort to improve medical science demands. It is deeply to be regretted that its circulation is considerably impeded by the heavy amount of postage. At this station we are three hundred miles from Bombay, postage is no less than one rupee.*" Another letter from Madras states "*I regret to say that the new arrangement for supplying your Madras subscribers with the India Medical Journal is attended with inconvenience which I believe you did not think of. Besides the half rupee postage you paid in Calcutta we have to pay two rupees two annas for the banghy tappal from Ganjam to Madras which is more than can be well afforded in these times, as it makes the journal a little more than four rupees each number.*" Now we considered these circumstances, as they regard the cause of humanity and medical science, of such importance that we took the liberty of addressing the Government upon the subject. We submitted that, in consequence of the great increase of medical correspondence to the Monthly Journal of Medical Science and the large supply of British and Foreign medical intelligence, we were anxious to extend the size of the Journal at our own expence, that is to say, without increasing the present rate of subscription. The additional pages however would increase the rate of postage which medical men already objected to, and but for this objection we could communicate, twice instead of once a month the valuable mass of medical intelligence which flow in upon us. We did not seek an exemption from postage, but that four annas without reference to weight might be the highest rate charged to every station throughout India. We endeavoured to prove to the Government the advantage which the state would derive from the dissemination of documents on Medical Topography, Medical Statistics, Hospital reports on hospital practice. But we regret to say that the reply we received stated that no reduction in the Post office regulations could be made in favor of the Journal of Medical Science. We have stated these circumstances to shew our subscribers that we have endeavoured to discharge our duty by consulting their interest and that of Science. Notwithstanding these circumstances, we beg to propose an alteration in the management of the journal,

without which we find we cannot communicate to our readers the valuable medical intelligence which is now shut up in our desk. Our proposal then is to give two numbers monthly instead of one. Now it is obvious that in the dispatch of one monthly number which might in the least exceed the prescribed weight, our subscribers are charged treble postage, viz. twelve annas, whereas according to our proposal we can furnish two numbers of 40 pages each, twice a month, that is to say 80 pages for four ann as less. After the 1st of January 1836 the Journal of Medical Science will therefore be published twice a month; provided the proposition meets with the approval of our subscribers. To subscribers who pay in advance the amount of subscription will be Rs. 24 for one year. For a single number Rs. 1 4. To such subscribers however as wish to continue to take in the Journal monthly only as heretofore, it will be furnished as usual. The difference in the monthly number will necessarily be the exclusion of some part of the selections; it will however contain all domestic intelligence.

Without some arrangement of the kind as now proposed it is impossible to carry into effect the objects of the Journal of Medical Science. We cannot embody the spirit of the Medical Journals published in Europe in the few pages which are now given monthly, and furnish the valuable lectures of Magendie on Physiology and medicine, Wardrop and Liston's Clinical and Surgical lectures, Davis' lectures on diseases of the chest; Graham on Forensic medicine, Rigby on Midwifery, Stokes on the practice of medicine &c.—lectures which are so popular in Europe and contain so much valuable information deduced from practical knowledge and profound learning.

Moreover it is not our intention to give mere notices of works which issue from the press in India, but to exhibit a complete view of their value and claim to celebrity, that is to say, an analysis of their contents and discussions on the doctrines and principles maintained in them. By a review conducted on the plan now proposed we hope to advance the cause of science and to benefit the public. Neither biassed by publishers, party-spirit, nor personal friendship, we shall discharge our duty on the principle so admirably suggested by Locke.

"We should not judge of things by men's opinions, but of opinions by things."

☞ To avoid double postage and the disagreeable necessity of having their copies returned to us, we shall feel obliged if our Subscribers will immediately on a change of residence inform us of their new address.

TO CORRESPONDENTS.

The following communications will appear in our next number.

HUNTER's case of Pectoral disease.

Dr. McKINNON on injuries of the head.

Dr. McKINNON's case of Lithotomy.

Case of Scrotal Elephantiasis with a drawing, by Dr. Vos.

Sketch of Mr. Syme by EDINENSIS has been received. We rejoice in having enlisted EDINENSIS under our standard, and we congratulate our readers that they are still to be delighted by his able and interesting sketches. Where is Scotus? we trust he will soon come forward.

We have received I's communication on the subject of vaccination, his suggestions are of such vital importance that his paper will receive particular attention.

We shall strictly adhere to Dr. Esdaile's wishes. The reason of our adopting the form to which he alludes, was to promote the important object of his valuable communication.

We are compelled to delay Dr. MACCOSH's able paper for want of room.

We have received the communication from our esteemed correspondent Dr. Campbell. We concur in his view of the case, and will certainly adopt his suggestions.

W. L's. singular case has been received. We are anxious for communications like his, shewing the practice of natives, in large native cities.

We have just received Dr. DRUMMOND's able communication; but it came too late for our present number. We are under many obligations to him for his promised support.

We have received E—— on a "A Post Mortem Conversation." That is to say among the spirits of the dead how they were murdered by bad clinical treatment.

Also a communication giving an account of the Burmese practice of Midwifery from "A Friend at Rangoon!"

The following work has been received for Review.

"On the Medical management of Indian Jails" by JAMES HUTCHINSON, ESQUIRE, Surgeon on the Bengal Establishment.

We are still compelled for want of room to omit our first paper on Medical Topography, and another on the organization of the Medical department in the King's Army. We have also been compelled to omit General Orders the insertion of which would have subjected our subscribers to double postage.

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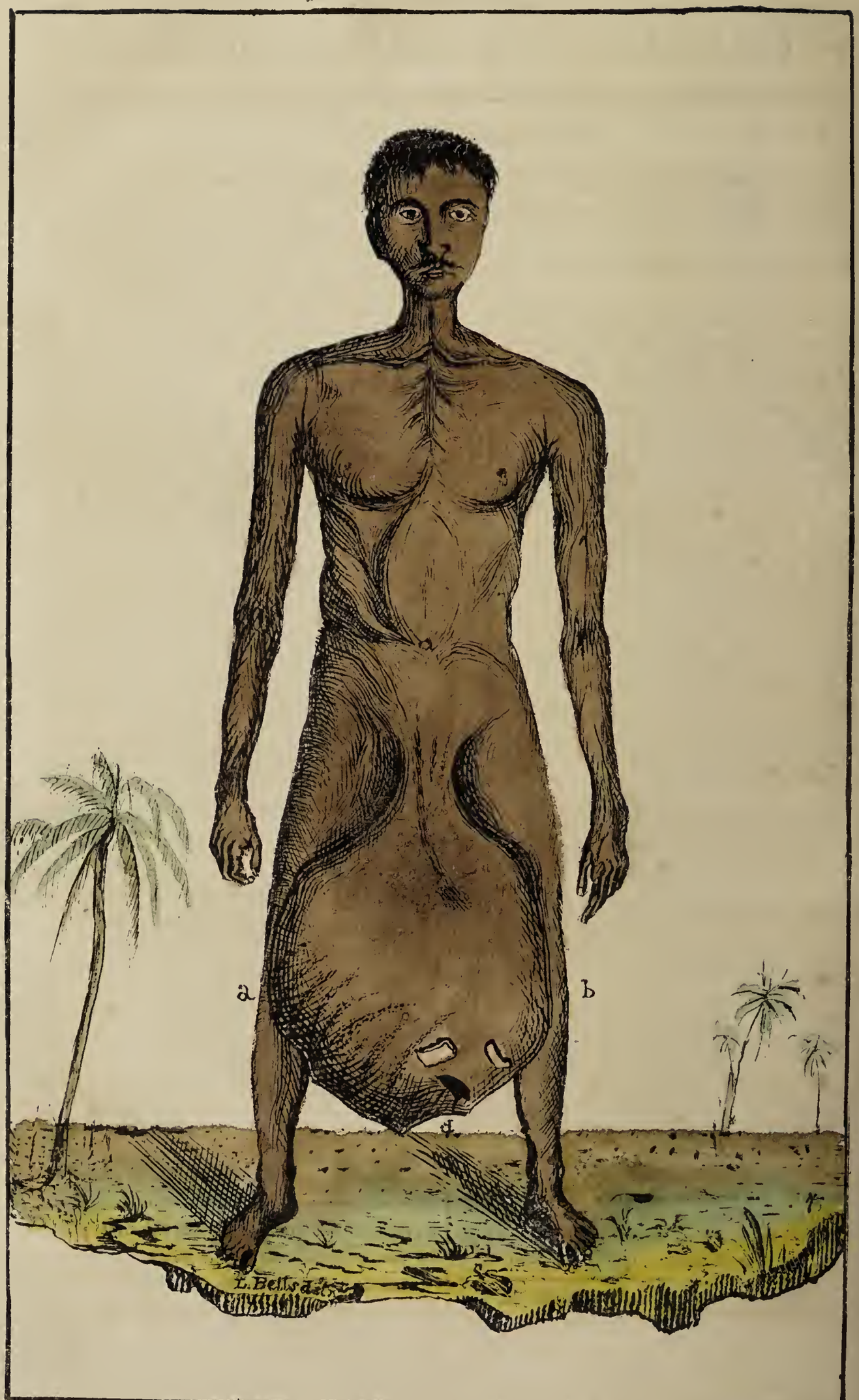
Dr. Vos's Case
of
Scrotal Elephantiasis



THE INDIA.

JOURNAL OF MEDICAL SCIENCE.

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ORIGINAL COMMUNICATIONS.

DR. VOS'S CASE OF SCROTAL ELEPHANTIASIS.

Ram Chundro Jogee, a weaver of the Tantee caste, is now by his own account not more than 40 years of age; he belongs to the village of Bhatpara* in the Pergunnah Haleesuhur. He followed his original occupation for about fifteen years, is not, nor was ever married; when about 30 years old he cohabited with a widow. The complaint he has now upon him, began to shew itself about seven years ago, with fever at every full and change of the moon. The first two years since the commencement of the complaint, the swelling made but little progress, about this time the widow left him, on the third and fourth years the increase of the swelling was more rapid. On the fifth and sixth years the increase of size in the swelling was so great as to preclude his working, when he began to beg about the neighbouring villages and towns for subsistence.

The present dimensions of this extraordinary swelling, are these—

Circumference at *a b*	upper	2 ft.	11 in.
	lower	3	7¾
Height from Os pubes to *d*		2	2½
Distance from *d* to the ground		0	7¾

Description of the enlargement of the Scrotum.

The skin covering the venus montanus was elongated from the natural state to about at least fifteen inches, by which circumstance the hair covering it were at least one and a half inch apart from each other, the elongation of the scrotum had taken in also the skin &c. of the Penis, by which the whole part was (it might be said) absorbed into one mass with the scrotum; the urethra was consequently also elongated to nearly the lowermost part of the extended scrotum, shewn in the drawing by a transverse opening; this small passage was visible, and through it the individual represented by the drawing discharged his urine freely, apparently without pain or impediment, equally as well as a person in health. The color of the swollen scrotum was reddish brown, such as is seen on an inflamed part when on the point of becoming gangrenous; two deep scars were visible somewhat above the opening of the urethra at a short distance one from the other. These were caused, as the man related by a caustic, which native doctors applied to remove the complaint. The whole of the lower part of the scrotum was tuberculated. He feels a slight pain on touching the part which is quite hard throughout, like a schirrus. No testicles could be perceived or felt, and the spermatic arteries, veins, and nerves were all elongated in common with the other parts.

* Opposite to the town of Chinsurah, and across the River Hooghly.

LITHOTOMY *versus* LITHOTRITY—NATIVE CONFIDENCE IN EUROPEAN MEDICAL PRACTITIONERS—CLAIMS OF THE NATIVE POOR ON THE GOVERNMENT—EMPLOYMENT OF MEDICAL MEN NON-PROFESSIONALLY.

In the following letter we find Dr. Mackinnon taking up the gauntlet thrown down by our worthy predecessors, and defending Lithotomy as being more beneficial than Lithotrity. We enter the arena not to join in the combat but as lookers on; and have no doubt our predecessors will return to the attack. It is by collision of opinion, that important facts are established; and we are glad of a discussion on a subject which is exciting so lively an interest among clinical practitioners in all parts of the world. Dr. Campbell is again met by Dr. Mackinnon on the want of native confidence in European Medical skill in a spirit becoming professional brethren and suited to the subject under discussion.

There are some observations at the conclusion of Dr. Mackinnon's letter which are worthy of consideration. In the first place he very properly alludes to the want of charitable institutions for the Natives like those we contended for in our last number. We

will not designate them simply Fever Hospitals, but hospitals for the reception of every description of sick poor and wounded. Surely the people have strong claims upon the Government which reaps the revenues of the country to provide for the sick and needy of it; and we will venture to say that the expence can never be put in comparison with the great honor and praise the British rule will receive in return for such acts of benevolence and mercy. We concur also in Dr. Mackinnon's view of employing medical men non-professionally in situations where professional occupation is not sufficiently extensive to employ their time. Their literary and scientific acquirements might be turned to good account by the state in revenue, post office, and judicial appointments.

In one or two of your late numbers, you would seem to treat lithotomy with less consideration than it deserves; as a great boon to the natives of India, lithotrity is all in all with you. Now I would not wish to be thought one, who wishes to damp zeal, or to retard improvement, but I do not think, it can ever be entirely brought to that perfection which shall render lithotomy "that relic of barbarism" as you term it obsolete, and more especially in this country. I have not observed that the Baron Heurteloup's attempts to operate by his method on young children, who are in this country the chief martyrs to the affliction of stone in the bladder, and in a case of a stone such as I have extracted how many applications of instruments small enough to pass through such an urethra would have been necessary. Would not the child have been dead from irritation long before the grinding could be finished. Most assuredly. The slowness of the process is a great objection to the application of lithotrity in native practice, and it is only native practice we have of stone in India, for they would often leave in disgust after one or two applications of the instruments. And I will ask fearlessly, what are your objections to lithotomy when performed by operators so skillful, and so successful, as Messrs. Burnard and Brett. The issue is almost certainly favourable, and the pain, I suspect, not very much greater than what are undergone in a tedious case of lithotrity. I have never witnessed but three operations of lithotomy in my life, and from two of these I certainly have not much grounds for arguing as I do. The first was in the Royal Infirmary of Edinburgh. Mr. Joseph Bell was the operator, and I dare say there are some of my contemporaries now in India who saw the operation and who will shudder now when they recal the recollection of it. The poor man healthy and in the prime of life was kept on the operating table for two hours, and died in the course of the night. The cause of failure was said to be a thickened state of the bladder, and a very large stone. The stone was large but not inordinately so. I saw the bladder at Mr. Russell's clinical lecture room. Its state was no excuse for the want of success. What then was the cause? I fearlessly assert want of manual skill and self-possession*. The next case I saw was in the same hospital. The late Mr. Allan, lecturer on surgery and the author of an excellent work on the same subject, was the operator on a boy of about fifteen. The stone, a mulberry one, was beautifully and dexterously taken out in three minutes, and the boy made a rapid recovery. The 3d. case, yet in the same surgical school, was operated on by Sir George Ballingall. He chose the high operation, having judged the stone to be of large size which it proved to be, though I think it might have been extracted through the pelvis. As it was, the operation was most awkwardly and unskilfully performed, and the patient, a fine healthy boy of nine or ten years, died the following day, certainly from the unjustifiable force, a necessary consequence to the smallness of the incision and to the hurried embarassment of the operator.

After such cases as these, one dare not raise his voice against the beautiful and scientific innovation of Civiale and Heurteloup. What I would say is, that in many cases the grinding down or hammering of a stone is impossible from different causes. In all cases occurring in the Mofussil it is yet so, because we have not Civiale's instruments. We are not even allowed common lithotomy cases. Wherefore let us do all the good we can, by performing the common lateral operation which when skilfully performed is not after all attended with much risk, nor deserving the title you have bestowed upon it "a relic of barbarism."

Having digressed so far from the original subject I shall e'en go on, further to do so by offering a few remarks on some other matters, lately either discussed or alluded to in the pages of your journal.

My esteemed, I shall say much esteemed friend, Dr. Campbell (for our friendship commenced in days gone by that we both look back to with pleasure and with sadness) has ably discussed the subject of the want of native faith in European medical skill. It is a subject rife with interest. That want of

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* In this case the operation en deux temps ought to have been tried.

faith which he so well appreciates must with all other prejudices give way to the light of intelligence which is now bursting over this hitherto benighted land, but as you and he truly observe, much of the cause lies with ourselves, in our ignorance of native language and character. As far as my own experience goes, I have not found in the natives so much a want of confidence in European skill as a want of patience and endurance to subject themselves to the measures necessary for a cure. There is not a day of my life that I am not consulted by natives; but if I do not cure them in a few days, they are sure to disappear; and if I do cure them, they also take their departure, leaving me in pleasing uncertainty. I recollect about two years ago having a patient labouring under anasarca, accompanied by febrile symptoms and obstinate constipation. The complaint was yielding to the usual remedies, and as generally happens when a native patient comes from the moofussil, I was feeding the man as well as curing him. He came to me one evening and said, that if instead of giving him, as I would, two annas of daily allowance, I gave him a rupee at a time, he could get his food much cheaper. I foolishly granted his request, and that very night my friend walked away with my rupee and my interesting case of dropsy.

I am decidedly of opinion that the unsatisfactory results we meet with in treating native cases, arise more from the peculiar positions in which we are relatively placed, than from a want of confidence in our skill. Does not the sipàhi, generally speaking, put full confidence in the skill of his Regimental Surgeon. I think he does, and the more so the longer the sipáhi has served in a Regiment. The attendance at the Calcutta Native Hospital and Dispensaries does not, as you remark so justly, betoken a want of faith in our skill, but Calcutta is half a century beyond the Mofussil in all the march of mind, and that too while few Europeans there understand the native character so well as those in the Mofussil. This is because the natives are meeting us more than half way.

But this fact of the natives applying for advice at the Calcutta charities, although only brought forward by you to prove a faith in European medical skill, appears to me to admit of another most useful application. I think the said institutions have in a great measure been the cause of the said faith, and I feel fully assured that such establishments all over the country would in a great measure remedy the evil which is complained of. At any rate such institutions, wherever they are, produce their fruits; and one case treated publicly in a Native Hospital spreads sooner among the people than a dozen cases in private practice. In these days of retrenchment, I fear, and I utter that fear with sadness, we have not much to hope for on this score, and public spirit there is none, in the native community itself. All this is melancholy enough, when we think how far a little would go in this way, not only towards the alleviation ofhuman misery but towards clearing away those prejudices which at present operate as a check to all improvements.

There is, gentlemen, another subject that fairly comes within the province of this journal, on which I would say some thing; but for the present I fear that I have already written too much: I shall therefore just content myself with stating my conviction that much advantage might accrue to the state by the employment of Civil Surgeons in duties not strictly professional. Is not a functionary with duties to perform similar to those of Coroner required in every district, and who so fit for such an office as a medical man? Let it be imperative for each officer so employed to obtain a knowledge of the native languages. Would not this again make him more useful, in his professional capacity. Gentlemen, I have done; but should you think this matter worthy of further discussion I shall resume it.

Yours faithfully,

R. Mackinnon, *M. D.*

Tirhoot, 8th May, 1835.

ACCOUNT OF THE BURMESE PRACTICE OF MIDWIFERY.

The following account of the practice of Midwifery among the Burmese will excite the astonishment of medical men more in Europe, than those in India, to whom the barbarous and cruel system is familiar. This statement is authenticated; and although the author is not willing to give his real signature to it, his accuracy, in regard to the circumstances he has brought forward, is not to be questioned. How loudly does the distressing description call for professional tuition in the obstetric art among the natives? and it strengthens the position we took up in our comments on the new Medical College, that a Professor of midwifery, who also would give lectures on female disease and those of children, should be added to the present number of Professors appointed for that institution. When we make such suggestions as these we are reminded of the expence: but how can the monthly expence of a few hundred rupees

be thought of for a moment, when by the expenditure of such a trifle thousands of lives may be saved, a variety of diseases prevented, and the number of deformed cripples which are now seen all over India be lessened..

To the Editor of the India Journal of Medical Science.

Sir,—I am induced to communicate to you a few details of the Burmese practice of midwifery, in order that you may draw up and send me a set of plain rules and directions, such as the superior knowledge of anatomy and medicine professed by our physicians would point out, and I will have your rules translated into the Burmese language and circulated here. I know not a more benevolent act which I could perform.

About the seventh month of pregnancy a Burmese woman is advised to tie her *t'hamien* or petticoat more tightly and lower round the body, just above the *fœtus*, in order to force and keep it down as low as possible, and prevent its ascending; which, if it did, would afterwards, it is supposed, render delivery more tedious and difficult.

When the labour pains come on, the woman is attended by one or two *Woon-zwè* (midwives), and by three, four, five, or even six of her female relatives or friends, who shut all the doors and windows of the room, so as to render it as close and hot as possible. She is in a state of perfect nudity, and being urged to take violent exercise, runs round the room as long as she is able to do so, without or with the assistance of her friends, sometimes stopping and pressing her loins against the posts of the house, sometimes raising a heavy weight with both hands, and forcibly bringing it down, as if pounding paddy, and sometimes falling down and rolling on the floor. All this time also she is uttering such loud and piercing cries and exclamations, as may be heard in the street and several doors off, vowing separation from her husband and wishing for death; which wish the Burmese consider as a proof of bad education and ignorance in any one expressing it. But the poor creature is quite distracted and void of all sense of propriety, and sometimes grossly abuses her husband all the time. He is not admitted near her, and generally sits in the next room or in the street, laughing on hearing himself abused; or if he possesses more feeling, he opens and lifts up the lid of every box in his house as a preventive against any charm that may have been used by any evil disposed person, and prepares also, in a manner which I shall hereafter describe, some *charmed* or *holy* water which he sends in to his spouse to drink.

The woman's body is smeared with oil, and her attendants with many speeches of encouragement and comfort, such as, that she will not die, that all women bear children in the same way &c., press down the child *violently* with their hands, urge the woman to strain, and sometimes put up a foot against her loins and press against her holding her arms back.

At last the woman is quite exhausted and falls on the floor. Some of the women still keep pressing the child down with their hands, trying to expel it forcibly; and there are instances, I am credibly informed, in which the woman is placed on her back, and the midwife sits upon her, or stands up and presses against the child with one of her feet! Some of the other attendants, in the mean time, sit round the woman, and watch and notice, in so loud a voice as to be often heard in the street or adjoining houses, the appearance of the different parts of the child.

When the child is born, it is still kept near the mother until the after-birth comes away, to produce which the attendants again press the abdomen of the woman, pull the navel cord, and sometimes beat her loins with a hard pillow, and force a portion of her long hair down her throat, in order to create an inclination to vomit.

As soon as the after-birth appears, the navel string is cut, and the child taken charge of by one of the attendants, whilst the others, generally four of them, one to each arm and leg of the woman, take her up, bathe her in warm water, and place her as close to a large fire as possible, smearing her body with turmeric mixed with a little chunam, and making her swallow 2½ ticals weight of salt, 2 of pounded turmeric, and a little chunam. A hot brick and salt enveloped in a cloth are also pressed against different parts of the woman's body in succession, and often a handful of warm salt is applied and *even introduced.*

This operation of exposure to fire, or rather roasting, as the Burmese women themselves call it *(mi'-ken)*, is one to which the woman is subjected for seven days, during which time, and often for a longer period, she is obliged to take the dose of salt and turmeric and chunam in the proportions before mentioned, three times a day, at sunrise, noon, and sunset, in order, it is said, to keep the inside of the body as hot as the outside; and to drink warm water when thirsty, which of course she always is—and once or twice a day also, she is made to use a kind of vapour-bath, by sitting near the fire with a bamboo frame-work over her covered with cloths steeped in hot water, or by sitting over a

fire covered up and sprinkling water upon the fire from time to time. She is often made also to sit on a heated brick covered with cloth. During the rest of the day and night, she lies on a plank or bamboo-stage raised five or six inches from the floor and only a cubit wide, and placed as close to the fire as possible: she can only just turn her back or stomach to the heat, as she finds it too great on either side. The heat to which the woman is subjected would be intolerable, but that she is every now and then smeared over with pounded turmeric and water. She is kept in a state of profuse perspiration, from which she is gradually relieved on the seventh day. A lady of rank, during these seven days, is known to have burnt as many as 1100 large billets of firewood, but the usual allowance is 2 or 300 billets. The wood of the tamarind tree also is used by those who can afford it, as it is said to make the hottest fire. During the whole of this operation, no bandage is applied any where, and at the close of it, her skin is quite blackened, and peels off afterwards.

Some of the Burmese say, that a crab half-roasted will not keep so well as when it is thoroughly done, and believe, that in the same way a newly delivered woman cannot expose herself too much to the fire. But from carelessness, or from the difficulty of shutting out draughts of air in a Burmese house, the poor woman often catches cold, and suffers from rheumatic affections of the limbs and other troublesome and lingering disorders; and whenever such cases of illness occur, the Burmese say, that they are owing entirely to the woman's not having been roasted enough! I have however heard many Burmese of respectability talk with horror of the customs of their country having subjected their women to such cruel sufferings, and attribute to this practice the cause of many women never having a second child. The principal midwife in this town, an active old Talain woman of 77 years of age, named *Mi-Ngyein,* states, that she has followed her profession for more than 50 years, that she has delivered more than 10,000 women, that she is now often called to deliver the great-grand-daughter of one whom she had attended in her early life, and that the average mortality, in her opinion, has been about ten per cent. This however must be much too high an estimate. Her usual charge is four or five rupees.

The diet of the woman during the first days after delivery consists of boiled rice with a kind of very hot broth, made by a mixture of the liquor of *Ngapee* or fish sauce, a large quantity of pepper, some onions and the root of a plant called *k,hura,* remarkble for its heating properties. This soup she drinks by itself, as well as taking it with the rice, and it is so hot as to make her eyes run with water; but it sensibly increases perspiration. During the roasting operation also, a quantity of oil and salt is applied to the top of the head with the hair divided, and it is then held for some time as close to the fire as the woman can bear it. I am assured however, that during this roasting operation, although the upper part of the body of the woman is always in a state of profuse perspiration, her feet and legs below the knees keep so cold, as to be unpleasant to the touch.

The mother is not supposed to have any milk for her infant, until after the third day; and to produce the secretion, her breasts are rubbed and fomented with warm water, and the nipples pulled and scraped with the nails of her attendants. As soon as the child's navel string is separated, a quantity of pounded pepper is taken by one of the attendants in her forefinger, and rubbed all over the inside of the little creature's mouth, in order to make it throw up any phlegm or other matter which may be lodged in the throat or lungs. Sometimes a little boiled rice is masticated by one of the attendants and forced down the child's throat; but usually, a little honey and water is given to it occasionally, which is its diet for the first three days, unless the child cries much, or the parents can afford it, when some woman who is nursing is called in to give the child the breast, until the mother can begin on the fourth day to nurse it herself.

NOTE.—This *charmed* or *holy* water given to a woman in labour is prepared by a person repeating seven times over a cup of water the following Pali words: *Yatau-han-bhaginee ariyaya Zátiya, Zàtau nábhizánami thentseittsa pánau Zeewita wauraupeta, tena thetstsena thotli te hautoo thatti gabat, tha,*—meaning, as I am informed by a Pali scholar, "O sister, from the moment of my having attained the state of an inspired priest of Boodh, I do not know a motive for depriving any sentient being of life, and as my words are true, mayest thou be at ease, as well as the being in thy womb." The Burmese have several *pareit* or prayers used as a preventive of evil, but the above is called *Engooli Mala pareit,* and was dictated by *Gaudama* under the following circumstances.

A Bramin, named *Aheintha-ka* of *Thawotti* (*Spavasti* in Oude,) applied for instruction in learning to a celebrated teacher in the city of *Tekkatho,* named *Deitha Pamoukha.* Being a man of bad and cruel character, the teacher was unwilling to instruct him, and proposed to receive him as a pupil, upon condition only that he should

present the teacher with 1000 human forefingers, thus setting the Bramin, as Samson of old had been set, a task, the execution of which, it was hoped, would cost him his life. The Bramin however proceeded to attack men, women, and children, and killing them, cut off their forefingers and hung them in a string round his neck, whence he was afterwards known always by the name of *Engoolee-Mala*, necklace of fingers. He had collected 999 fore-fingers and was in the act of chasing his own mother to kill her and complete his task, when *Gaudama* interposed between them, and converting the Bramin into a Buddhist disciple, made him a Priest and lodged him in the same monastery with himself, near the city of *Thawotthi*. *Engoolee-Mala*, however, had become the dread of the whole country around, and the cry that he was coming, or sound of his very name, terrified women and children, and made pregnant women miscarry. For some time after he had been converted by Gaudama, whenever he appeared in the streets of *Thawotthi*, as he did every morning to receive charitable offerings according to the custom of Buddhist priests, the women and children fled before him, and the men chased him with stones. Having been much bruised one day, he applied to Gaudama for protection, and he delivered to him the foregoing Pali words, desiring him to repeat them whenever he saw any woman, and assuring him that they would save him from all further molestation. The words operated as a charm, and they are now always used as a preventive of evil. They are considered of such wonderful efficacy, that the water with which any spot, on which a person may have been sitting or standing whilst reciting the words, is washed, can charm away evil and danger.

A. F.

REVIEW.

A PRACTICAL ESSAY ON THE HISTORY AND TREATMENT OF BERI BERI. BY ASSISTANT SURGEON JOHN GRANT MALCOLMSON, MADRAS MEDICAL ESTABLISHMENT, MADRAS: PRINTED BY ORDER OF THE GOVERNMENT, 1835: OCTAVO.

It appears that in 1832 the Medical Board at Madras, with the view of aiding the advancement of Medical Science, announced to the Medical officers at that presidency that a prize of Rupees 500, or a gold medal of that value, with a suitable inscription would be awarded to the writer of the best dissertation on the disease called Beri-Beri. It was found, after an examination of four essays on this disease, that Mr. Malcolmson's was the most meritorious, to him accordingly the prize was given; and the Essay, the subject of the present review, was directed by order of the Government to be published.

The work is divided into seven parts, viz. Introduction, Outline of Symptoms, Prevalence of Beri Beri, Causes, Ratio Symptomatum, Diagnosis, and the Treatment.

Mr. Malcolmson does not profess to give a systematic treatise on Beri Beri in its general history; but confines himself to an account of his own experience, "borrowing from books only occasional illustrations of the disease known in the Northern Circars." Mr. Malcolmson has fallen into the same error, however, as Dr. Mouat, regarding the obscurity in which he supposed the disease was involved. He remarks that "there is no disease regarding which our knowledge is more defective, and in which practice has been more injuriously directed by wrong theory and the most valuable remedies more abused, by being recommended in improper stages or forms of one of the most complicated maladies to which the animal economy is liable." When the preceding observations were penned, Mr. Malcolmson had not seen Mr. Hunter's works; as at page 42 we find the following remarks.

"At page 96 of Hunter on diseases of Lascars, the same fact is stated by Mr. Colhoun (afterwards Stirling), late first member of the Madras Medical Board, who was at that time (1800) assistant surgeon to a battalion of Madras sepoys serving in Ceylon. As this work is so scarce, I could not, until these sheets were in the press, obtain a copy in Madras or Calcutta."

The foregoing shews how necessary it is, before young authors give their opinions on the nature and treatment of disease with which they themselves are not familiar, to extend their enquiries into the works which have been published, not in distant countries where the disease may be scarcely known, but in the country in which they have first observed it, and in which it is endemic.

We make these remarks with reference to that part of the work before us in which we have the Ratio Symptomatum; and here we find Mr. Malcolmson referring to such a variety of authors and diseases, that instead of illustrating the phenomena of Beri Beri in the least, the references tend only to bewilder in the mazes of abstruse speculation a complaint which in our opinion has been already ably illustrated and defined; nay further, that instead of that abuse of valuable remedies to which Mr. Malcolmson alludes, the treatment had been most successful, we refer our readers to that part of our review of Dr. Mouat's paper in which we quote from Christie; that when the patients applied in time only two deaths occurred out of seventy treated. Mr. Malcolmson endeavours first to establish the proposition that the spinal cord is primarily disordered, and while he confesses, strange to say, that our knowledge of the pathology of the most carefully studied diseases of the spinal cord is imperfect and unsettled, he by such a proposition as this, and which he can by no means establish, throws difficulties in the way of the clinical observer. Such a course as this ill accords with the excellent words with which he commences his work wherein he expresses himself sensible, that "he serves medical science poorly, who encumbers it with ill digested matter." If then our knowledge of the disease of the spinal cord is yet "*imperfect and unsettled*" does he not go the very way to perplex the subject of his Essay with the very ill digested, imperfect, and unsettled matter, he professes to avoid. First then we are referred, by way of illustration, to a case in the 9th volume of the Medico-Chirur. Trans. it is a well defined spinal affection, one of Bostock's, but foreign to the disease Beri Beri. Mr. Malcolmson does not think so however, because Good happens to have placed, by mistake we have no doubt, this disease under order "CINETICA" and genus "SYNCLONUS." Good thus classed the disease because of the numbness and convulsive motions to which we have alluded. These are merely symptoms but not invariably attendant on the disease. We conceive Sauvage much better authority, who has introduced it in his list of "nomina barbara seu nec Græca, nec Latina, relinquenda" Tom. 1, p. 30. But Good marks it "Synclonus Beri Beria." Βερβερι, Eustath, "concha" "ostreum;" "a conch or shell," and hence figuratively incurvation in general. Good adds that Beri Beri is possibly an oriental term, and is so stated by Eustathius from whom Scapula copied it. The root of the term is supposed to be the Arabic بری (beri) which signifies literally "præcido, concido, to cut up or cut off" like the Greek *συνεχόπτω* whence *syncope;* and *metaphorically* "defatigo exhaurio," to wear out, exhaust, enfeeble, which is unquestionably more characteristic of the disease. Good notwithstanding adds the following. "The term (meaning 'beri beri') is still preserved in Ceylon, but applied to a different disease, a peculiar sort of dropsy, commencing with stiffness and œdema of the lower extremities, which shortly spread over the whole body, producing dyspnœa, vomiting, convulsive motions, and death." Now the above is a simple and plain description of Beri Beri. Let nosologists or authors distort it as much as they choose, and when they do so, we repeat that they only place obstacles in the way of the clinical practitioner, and impede the progress of true Medical Science.

Mr. Malcolmson proceeds to refer to Abercrombie on the causes of palsy, to Dr. Duncan jr. Mr. Phillips, to Cooper's Edition of Good's works, Martinet's Pathology, Mr. Earle's paper in the Medico-Chir. Trans. and to other authors who have severally written on palsy, diseases of the brain, and spinal cord; and who are brought forward as evidence to support Mr. Malcolmson's views. He then goes on to give a case of Beri Beri, with dissection, which he endeavours to illustrate by quoting a case by Lawrence, which occurred in Bartholomew's hospital. In that case there had been an accidental injury of the spine by a fall on the back; the patient of course lost the use of his legs: but

all this went to shew, in Mr. Malcolmson's opinion, that patients in Beri Beri "totter more or less in the gait", and to prove that, in this disease, the spinal cord, is affected. After this a reference is made to Sir Charles Bell's discoveries, and a case of remittent fever quoted. The case was of a Serjeant of intemperate habits; and the symptoms, we believe, were the consequence of the fever and intemperance. Mr. Malcolmson thought differently, because the feet became *numb*, the loss of feeling extended as far as the trunk, and the power of motion was impaired till the hour of death. After this comes a reference to a case of anæsthesia, recorded by Dr. Yelloly in the 3d vol. of the *Medico-Chirur. Trans.* It is there shewn that in hepatitis numbness extends down the arms. It will be sufficient to add that Mr. Malcolmson, by these, as he would by all other paralytic affections, strives to prove those diseases to be connected with Beri Beri. If they evinced in any stage the slightest numbness or paralysis, it must inevitably be traced to an affection of the spine.

Our time and space will not admit, neither will the patience of our readers allow, of our accompanying Mr. Malcomson thro' all his windings to arrive at his opinion which simply is, that "*there cannot be a doubt that the lower part of the spinal cord is the seat of the disease.*" We must turn from that part then of Mr. Malcomson's laboured speculations, and refer our readers to a simple and yet lucid description of a dissection of a case of Beri Beri which occurred in Ceylon, and was treated by Mr. Hamilton who published his paper in the *Trans. Med. Chir. Society Edin.* 1826. Mr. Hamilton* in a straight-forward manner shews the fact which Mr. Malcomson toils through inapplicable references to prove. The dissection alluded to exhibits congestion in the spinal marrow as in other parts of the body; but that it existed more particularly in the dorsal region, than in other parts. Where this is the case the paralytic symptoms in Beri Beri are accounted for at once, and we really cannot see why Mr. Malcolmson should have wasted his time and taxed his readers' patience to establish so self-evident a proposition.

Mr. Malcolmson has fallen into another error similar to that of Dr. Mouat's, wherein the latter gentleman endeavoured to shew the "inosculating link, which connects together affections, hitherto considered distinct maladies."—one of the most dangerous propositions which can be introduced into the speculations of the clinical practitioner. It attacks at once all scientific arrangement. The principles of nosology must at once be abolished, and instead of morbid affections being conjunctively and consonantly examined agreeably to the laws of similitude and discrepancy, all would tend to confusion instead of that simple systematic modification which is the index to disease and its symptoms for the guidance of the student and practitioner. Such then must be the result of the attempt Mr. Malcolmson makes by giving the following abstract of diseases which terminated in Beri Beri.

Abstract of diseases which terminated in beri beri.

1822 & 1823. Cases admitted with	Admitted.	Cured.	Relieved.	Discharged on sick certificate.	Died.	Remaining 1st January 1824.
Febris.....	5	3	2	0	0	2
Phlogosis	2	0	2	0	0	2
Rheumatism .	5	2	1	1	1	1
Diarrhœa	1	1	0	0	0	0
Tetanus	1	1	0	0	0	0
Anasarca	3	1	0	0	2	0
Syphilis.....	2	1	0	0	1	0
Total	19	9	5	1	4	5
Grand Total	65	29	20	4	12	20

Remarks.—Of the 19 cases admitted included in this table, only one was attacked with the beri beri in June, there remaining 18, between the months of August and January of both years.

Now we will venture to say that the terminations in the above were similar to those in the cases we reviewed in our last number. Cold and diffusive intumescence of the skin (the consequence of disease and a broken down constitution) or what has

* Mr. Malcolmson says that he only saw this paper after he had made his original notes.—Ed.

been so faithfully described, by that able practical writer John Hunter, as a disease which often produces such weakness as to destroy itself, or in other words that the morbid action ceases from debility and that the strength of the system is completely worn out. But Mr. Malcolmson and Dr. Mouat would not by such a vague proposition as this class Beri beri as a disease distinct in itself; for they consider it as an effect of disease which is inevitably fatal. Our readers will at once perceive the danger of such a proposition. Having thus submitted some of our objections to Mr. Malcolmson's work, in our next, we shall commence upon the practical part, which will not only be far more interesting but instructive.

A REPORT ON THE MEDICAL MANAGEMENT OF NATIVE JAILS, THROUGHOUT THE TERRITORIES SUBJECT TO THE GOVERNMENTS OF FORT WILLIAM AND AGRA, TO WHICH ARE ADDED SOME OBSERVATIONS ON THE PRINCIPAL DISEASES TO WHICH THE NATIVE PRISONERS ARE LIABLE, THE WHOLE COMPILED IN A GREAT MEASURE FROM DOCUMENTS IN THE OFFICE OF THE MEDICAL BOARD. BY JAMES HUTCHINSON, ESQ. SURGEON ON THE BENGAL ESTABLISHMENT, ONE VOL. 8VO. CALCUTTA: THACKER AND CO.

The subject of the work now before us occupied a considerable share of the attention of the celebrated Howard, and justly obtained for him the proud distinction of being unquestionably the greatest known Philanthropist of the age in which he lived. In the prosecution of his great and benevolent design of obtaining wholesome laws for the regulation of jails, he was led neither by rashness nor undue enthusiasm, but by a serious and deliberate conviction that he was pursuing the path of that moral duty, by which he hoped to be more extensively useful to his fellow creatures' than he could have been in the narrower circle of private life. The great good which resulted from his unassisted labours is too well known to need any further mention than that the management of jails excited an interest not only in the palaces of Kings, but also in the councils of every nation in Europe; by which means were adopted for the removal as well as prevention of filthy diseases and wretchedness.

Mr. Hutchinson commences his work by observing, that the object of his present labours is to awaken the attention to the Medical management of Indian jails with the view to alleviate the sufferings of an extensive and unfortunate class of people. It appears from our author's account that the average number of prisoners amount from thirty-six to forty thousand persons under confinement throughout the presidencies of Fort William and Agra. Many of these, it is alleged, are not incarcerated for any heinous offences "but for such, as in other countries we are apt to consider as emanating from the high and warlike spirit of the people; in short, for asserting or defending those rights which the miserably tardy course of civil justice has proved insufficient to protect."

The foregoing is a very serious charge against the Legislature of the country: in regard to its justness. If report be true, Mr. Hutchinson is a well qualified individual to decide, seeing that it is ascribable to his intelligence and very useful communications to Lord William Bentinck on Indian judicature, that he obtained his present onerous appointment of Secretary to the Medical Board. But is it possible that the brave and independent assertion of one's rights is thus attended with incarceration: can the administration of justice be thus impeded? under a Christian and a British rule? By such a system it is at least obvious that instead of securing the happiness, the allegiance, the submission, and the affections, of the people, we shall only excite their indignation and feelings of determination to throw off the shackles which so unjustly bind them. We earnestly hope the statement Mr. Hutchinson has made upon the subject may attract the notice of gentlemen in the judicial branch of the service, and be the means of remedying an evil as cruel to the individual as it is dangerous to our rule. The following remarks, although not very clearly expressed, will give our readers some idea of the

misery and mortality among prisoners in particular situations.

"I pretend not to be a Howard; but were these men as criminal as they are represented to be, I should nevertheless feel called upon, by every sentiment of humanity, to ameliorate their condition to the utmost of my power, consistent with the due enforcement of the punishment awarded them; for I hesitate not to assert it, as my opinion, that we can have no right to inflict a single pang, beyond that, to which these unfortunate individuals have been sentenced by a competent tribunal. There are few, who will read the distressing occurrences recorded in the following extract from the report of a medical officer, now deceased, nor feel inclined with me, to interfere to the best of his ability, to prevent the recurrence of scenes, painful even to read of, and which may be supposed to have diffused, at the time, anguish and misery among hundreds of surviving relatives.

During 'the first six months of 1829, fifty-nine deaths occurred, and during the succeeding six, one hundred and seven;' and this too, be it observed, in a jail containing six hundred prisoners, or less: But to return to the report: 'With reference to the extraordinary mortality and waste of human life exhibited in the returns of this hospital, I do not consider, that I am going beyond the limits of my duty, in pressing on the attention of Government the propriety of some measure modifying the present penal regulations, so as to substitute some other punishment for that of long continued imprisoment, which in this jail, in so large a proportion of cases, has proved equivalent to a sentence of death.' The dreadful mortality recorded in this extract is perhaps unparalleled, and yet other instances of a nearly equally appalling nature might be cited, were there occasion for it; my object, however, is neither to harrow up the feelings, nor to indulge in useless lamentations for the dead; but to endeavour to benefit the living."

Mr. Hutchinson proceeds to make a comparison between the rates of mortality which prevails in our native army and among the convicts in our jails, and shews that the average of mortality in the native army is little above two per cent: "but that a mortality of 25 per cent. is not unsual among convicts, and that while the average mortality throughout the whole of the native troops, during the past year, has been scarcely one per cent.; that amongst the convicts under confinement in our jails has been little less than seven per cent." Mr. Hutchinson then points out the difference in the advantages the sipáhis of our army comparatively enjoy, which in our opinion he has considerably overrated; for such is the crippled state of every native regiment in the Hon'ble Company's Service at this date, that we will venture to say there is no soldier in the world who undergoes such labour and fatigue in the performance of guard duty, parades, and treasure escorts. We are satisfied, saving the depressing idea of being a convict, the prisoner's life as regards laborious duty is a life of luxury compared to the sipáhi's at some stations. We consider ourselves competent to discuss this point, from having had much experience among both classes.

With a just view then of the importance of the subject, it appears that in December 1833 the Medical Board issued a circular particularly to Civil Surgeons in charge of jail hospitals. Our space will not allow of our giving more than an outline of the circular.

It adverts to the extreme regret with which the Medical Board has observed the great mortality among the convicts under confinement. The difference was so great and striking between them and the native troops, that the Board believed that by the adoption of judicious measures it might be diminished. It called upon all Surgeons at Civil stations to explain the causes of the great mortality: the influence which diet, clothing, and housing had on the health of the prisoners. It called for a report on the average area of cubic feet allowed to each prisoner in jail and to each patient in hospital; and opinions on the subject of ventilation and situation of the jail, on the construction of the buildings, on the effect of climate, change of habits, and abstinence from spirituous liquors or intoxicating drugs which tended to depress the minds of convicts. It called for a statement of mortality and opinions as to the means likely to reduce the rate of mortality.

The circular had its effect; nearly the whole of the Medical officers attached to

civil stations complied with the Board's commands. We now proceed to notice the reply: they are given under Chap. ii. headed "the Statistics of Indian jails and of the evils, necessary and contingent, attendant on incarceration."

Mr. Hutchinson opens this chapter by given statistical information afforded by Mr. Assistant Surgeon Kean. This gentleman states, that there were 548 persons under confinement at a period, when the jail was considered healthy. Out of the above number there were twenty-nine sick or one out of every nineteen. The following table shews the class of persons most affected by sickness:

Out of	12	Females, there are ..	0	sick.	
,,	43	Debtors, ...	1	,,or 1 in	43
,,	505	Convicts, and untried,	28	,, 1	18
,,	378	Mussulmans, ...	16	,, 1	23½
,,	170	Hindoos, ...	13	,, 1	13
,,	78	non-labouring convicts	2	,, 1	39
,,	305	Labouring convicts,..	26	,, 1	11¾

Mr. Kean states, however, that those who are obliged to labor "are fonder than others of coming into hospital for trifling causes, such as chafing from the irons, &c. to which they are more liable, and if not shamming, are not discouraged." Mr. Hutchinson then proceeds to comment on confinement being the principal system of punishment since corporal punishment has been abolished by law. He says that prisoners among the natives of India are of the poorer orders, and consequently, being incapable of paying fines of the most trifling amount, confinement in jail is necessarily substituted, and is therefore the universal punishment in India. Our author is of opinion that this mode of punishment is injudicious, as it removes a numerous class of persons from the management of their families and of their private affairs; the work they are employed in is unproductive; besides, being disgraced, their morals are not improved by it: the incarceration is moreover attended with much misery to their families who are frequently left to indigence and beggary. This punishment according to Mr. Hutchinson is in addition to anxiety and suspense before trial, "and utter ruin entailed by bribing almost of every individual with whom they are brought in contact both before and after it. Such a picture of distress as this is indeed sufficient to excite feelings of commiseration for the incarcerated Indian, nor are we astonished at the seeds of disease being implanted under the influence of so many of depressing passions.

Mr. Hutchinson considers the change of climate and mode of life to be another cause of disease among prisoners. He is of opinion that the inearceration of the inhabitants of the hilly tracts in a jail located on the plains is tantamount to condemning them to death. The foregoing causes then, in our author's opinion, operate with almost uncontrollable power. To remedy the evil he suggests the establishment of a subsidiary jail in a suitable part of the country. In this opinion he is supported by Mr. Scott, Commissioner of Assam, who suggested to the Governor General in Council the expediency of removing as many prisoners as possible to the hills, where, according to Mr. Scott, deaths are much less frequent. He declared that he could entertain no reasonable hope that the great mortality, with reference to Assam, would be reduced, if the prisoners remained there where at a moderate computation they amounted to little less than four hundred.

Mr. Hutchinson concludes this part of his work by adverting to the habits of prisoners which are totally changed from that before confinnement, as regards the number of their daily meals, and the hours of taking them, their modes and hours of labour. Many previous to imprisonment had been accustomed to the use and abuse of spirituous liquors or some intoxicating drugs: he shews that opium is extensively used by the natives especially in the districts of Bengal. Listlessness, languor, and depression, of the mental powers are consequences of a discontinuance of this destructive drug. In a note Mr. Hutchinson gives—

"The following account of the symptoms resulting from the deprivation of opium in those who have been accustomed to its use, from the pen of Dr. Lamb of Dacca, is so graphic, that no apology is necessary for

transferring it to my pages: 'At first, when the loss of the accustomed stimulus is felt, there is depression of spirits, languor, yawning, giddiness, discharge of water from the eyes, pains in the limbs, burning of the hands and feet; then succeed slight twitchings of the tendons, loss of appetite, tumidity of the abdomen, costiveness, pain at the umbilicus, and lastly looseness, especially at night; and want of sleep. These symptoms in many cases continue for months, till the constitution overcomes the evil partially or entirely. Of the number I examined, only two men asserted, that they had experienced all the symptoms above described, and recovered their strength and appetite, and afterwards felt no inclination to revert to their old habits. The remainder were still suffering, in proportion to the length of time they had been habituated to the drug."

We must uow conclude, but we promise to resume the review of this work in our next. We take this opportunity however to state our intention of recurring to the review of the remaining papers in the seventh volume of the *Trans. Med.* and *Phys. Society.*

HOSPITAL REPORTS.

We beg to draw the particular attention of our readers to the able remarks of Mr. Drummond on his treatment of a case of diseased testicle, in which the ointment of hydriodate of potass was applied with success, aided by the tincture of iodine administered internally.

BENIGN FUNGUS OF THE TESTICLE.

By Assistant Surgeon A. Drummond.

Although benign fungus of the testicle is a disease which does not attach to itself any degree of importance, equal to that of fungus hæmatodes of the same organ; yet the difficulties to be met with in the treatment of it are sometimes considerable, as the case which I am about to offer will in some degree shew, and by no means so easily overcome as the observations of Mr. Samuel Cooper and Mr. Lawrence would lead us to expect.

Mr. Cooper, who quotes Callisen as describing the affection, designates it from him "lipoma of the testicle"—an excrescence which grows from the substance of the gland, and sometimes from the surface of the tunica albuginea, and is usually preceded by an enlargement of the testicle, in consequence of a bruise or some external violence: a small abscess takes place and bursts, and from the ulcerated opening the fungus gradually protrudes. Mr. Cooper proceeds to represent how unnecessary and improper it would be to extirpate the testicle, on account of this affection, if after the subsidence of the inflammation the part should not seem much enlarged and indurated, and from a successful attempt made by Sir James Earle, recommends the fungus to be cut off, or destroyed by caustic.

Mr. Lawrence, in speaking of the treatment, is of opinion, that if the complaint were left to itself, the swelling would probably subside, the fungus shrink, and a complete cure ensue, without any professional assistance; but he adds, that the disorder is so indolent in this stage that a spontaneous cure would not be accomplished till after much time. He says, that the excrescence may be removed with the knife, or, if the nature of its attachment permits, with a ligature; or that, it may be destroyed by escharotic applications. He prefers removing the tumour to a level with the scrotum, with the knife, as being the most expeditious and effectual mode of treatment, but is opposed to castration in this malady, since in no part of its progress, he conceives, nor in any of its possible consequences and effects, can it expose the patient to the slightest risk.

I shall now proceed to detail the case, which was made over to the hospital of the European Regiment, and if I mistake not, by Dr. Forsyth, whose account of the treatment employed, while the patient was under his care, I have not been able to find.

The patient on admission said that he had been kicked by a horse in the testicle, and that afterwards the fungus made its appearance, having been preceded by a severe pain and considerable enlargement of the testicle, accompanied by inflammation which was terminated in an ulcerous opening of the scrotum and gave birth to the tumour. The fungus had now existed about three months, and the patient been in the habit of using nothing but the red precipitate ointment as a local application.

CASE OF DISEASED TESTICLE.

Edward Reynolds, Pt. 1st Company, admitted 13th August, 1833, aged 28 years, was admitted Aug. 14th into the European Hospital with a fungous red irritable looking tumour about the size of a large walnut projecting through an extensive ulceration of the scrotum. The tumour projects abont an inch from the ulcerated opening and adheres closely at its base to the inner surface of the scrotum. Patient's health generally good.—Nit. argent. mane et vesp. applr. Ht. mist. sennæ ℥vj.

16th.—Continues to use caustic applications; bowels are open.—Cont.

17th.—Tumour not much lessened; patient does not complain of any pain.—Cont.

18th.—Made the tumour level with the scrotum this morning by cutting off the projecting part; there was a little hemorrhage, but no pain.—Cont.

27th.—Tumour has increased considerably since yesterday. Caustic applications have been continued, and patient's bowels opened by six ounces of purging mixture.—Cont.

29th.—Tumour has not increased much, and patient enjoys good health.—Cont. Let a poultice be applied after every caustic application.

Sept. 1st.—Tumour is gradually regaining its former bulk, considerable redness about the scrotum.—Cont.; poultices.

3rd.—Redness of the scrotum greatly diminished; tumour not much increased; bowels confined.—R. Ung. Simpl. ℥i. Nit. argent. ℈ss. M to dress the tumour with in the morning and secured in its place by Emp. adhœsiv; Ht. Mist. sennæ ℥vj.

4th.—Much as yesterday.—Cont.

8th.—Tumour much less, but adhesion at its base to the scrotum continues.—Cont.

12th.—Much as last report.—Cont.

16th.—As last report. Cont.

20th.—Tumour much larger, and redness of the scrotum. Patient complains of stinging pains in the testicle.—Discontinue dressing, and alum. ust. q. s. mane et vesp. appr.

21st.—Much as yesterday.—Cont.

25th.—Not any improvement.—Ungt. argent. nit. app.

28th.—Tumour continues of its usual size, but patient complains of pains in both groins and considerable feverishness. Pulse not hurried at present.—Ungt. Hyd. Oxyd. Rub. app.

30th.—Occasional feverishness, redness of the scrotum and stinging pains in the testicle.—Ungt. Ox. Hyd. Rub, cont.

Oct. 6th.—Complains of occasional feverishness, tumour continues much the same in size; bowels are irregular; skin warm.—R. Calomel gr. x. Ext. Colocynth Co. gr. x. m. ft. pil s. s. at noon Mist. sennæ ℥vj. Ung. Cont.

7th.—Bowels have been freely opened; considerable swelling of the penis which in appearance resembles a distended bladder; redness of the scrotum, and pain in the groin.—Omit ungt. Ox. Hyd. Rub. et Cataplasm app.

8th.—Pain in the groin and inflammation of the scrotum; penis not diminished in size.—Aq. Lytharg pen. app. Hirudinis xx. scrotum app. et cataplasm scrotum app.

9th.—Much better since leeches were applied; pain gone from groin, and redness of the scrotum greatly diminished; bowels confined.—Ap. Lytharg: Cont. Cataplasm Cont. Ht. mist. sennæ ℥vj.

11th.—All redness and irritability nearly gone.—Cont.

14th.—Penis reduced to its usual size; scrotum slightly red: tumour much larger, but not of an irritable appearance.—Cataplasm; Cont.

15th.—Much as yesterday.—Cataplasm; Cont.

16th.—Tumour having protruded much more than formerly was again brought to a level with the scrotum this morning, and attended by considerable hemorrhage. No pain was complained of; the skin was afterwards brought tightly over it by adhesive strap.—Emp. adhœs.

17th.—Emp. adhœsiv. cont.

Nov. 3rd.—Have levelled the tumour since last report with the external opening, and have used pressure of lead covered with lint, secured firmly over the tumour by adhesive straps; skin begins to draw over the tumour which is greatly better, is permitted to go out in the dooly to-day for two hours to transact something about his pay.

Vespere.—Has violent fever and headach this evening; pulse hurried; skin hot; aching pain proceeding up the groin from the testicle.—*Vesp.* Venesectio ad ℥xx. Hirudiness xx. temp. app.

4th.—All symptoms of fever have disappeared; pain gone from the groin; swelling however is slightly protuberant this morning.—Emp. adhæsive Cont.

5th.—Greatly improved.—Cont.

6th.—Improving.—Cont.

11th.—Tumour growing very small and skin contracting over it.—Cont.

16th.—Continues to improve.—Cont.

Dec. 1st.—Improving.—Cont.

13th—Sore till of late has been going on improving, but now shews a disposition to open; patient passed some blood this morning, and bowels have been for some time in a deranged state.—R. Calomel gr. x. Ext. Colocynth Co. gr. x. M. ft. pil no. iij,—Ht. mist sennæ ℥vj. at noon, chicken, omit Beer, 2 Ms. of Port.

14.—Bowels were freely purged and no blood perceivable in motions; sore continues open.—Ht. Ol. Ricini. ℥j.

15th.—Passed some blood yesterday at stool; sore is not improving. R. Ext. Colocynth Co. gr. x. Hyd. submur gr. x. m. ft. pil. no. iij. at noon. Ol Ricini ℥j.

16th.—Bowels have been freely opened but no appearance of blood; sores as yesterday.—Rep.

Vespere.—Bowels have been moved today.—Pil. Rep.

17th.—Has been very much purged; stools bilious and natural; Sore as last report.—Ol. Ricini. R. sulph quininæ grxvj.

—Ferri. sulph gr. ij. mist sennæ ℥vj. m. to be divided into three doses and given daily.

18th.—Sore as yesterday; bowels are open —Cont.

Vespere.—Great pain in the side of the affected testicle.—V. Hirudinis xx. p. d. app.

19th.—Pain slightly relieved by leeches, bowels are open.—Cont. mist. S. Quininæ.

Vespere.—Has been passing much slime to-day.—V. Pil Cal. c. Ext. Colocynth Rep.

20th.—Sore appears rather worse ; complains of pain in the testicle ; had three stools during the night.—Ht. mist. sennæ ℥vj. mist. S. Quininæ Cont. Hirudinis xx. to be applied to the groin.

21st.—Much as yesterday ; bowels are open.—Mist. Quininæ Cont.

Vespere—Has severe pain in the testicle —V. Hirudinis xx. app. p. dol.

22nd.—Leeches were applied, and pain very much relieved ; sore looking much better; bowels are freely open.—Med. Cont.

Vespere,—Pain at lower part of testicles —V. Hirudinis vj. app.

23rd.—Leeches were applied, but pain continues ; sore much as yesterday ; bowels freely open.—Med. Cont. Hirudinis x. p. d. app.

24th.—Was vomiting this morning and feels generally unwell ; testicle affected at the lower part, sore slightly improved in appearance.—Ht. Pub Ipecac. ℥ss. s. s. R. ant. tart. gr. ij. aq. font one pint, M 2 ounces every half hour till full vomiting is excited. Alia Meda. Cont.

25th.—Emetic operated powerfully both on the stomach and bowels ; had severe pain in the testicle for which twenty leeches were applied but no relief was obtained ; took three calomel pills last evening which he afterwards vomited ; bowels however have been freely moved ; sore not improved. —Mist. Sulph. Quinine, Cont. appl. Lotio acid nit. to the sore. App. Hirudinis No. xij. Test. c. ft. et. catapl. *Diet*—Rice Pudding.

29th.—The testicle has been extremely painful for several days past, and is now painful though less so since the leeches were applied ; the testicle apparently improving. —App. Hirudinis no. xij. testicle ft. et catapl. R. Pulv. Ipecac. c. gr. xij. bis die.

31st.—Pain much less this morning and sore looking less irritable.—Cont.

Jan. 1st 1834.—Matter discharges freely from tumour and pain continues to lessen ; bowels are freely open.—Ungt. Ox. Hyd. Rub. et. catapl. cont. P. Doveri gr. xij. bis in die et vesp. cum un. gran. opii Cont.

2nd.—Much as yesterday.—Cont.

4th.—Tumour progressively enlarging and protruding through the old opening.—Cont. Ht. tinct Iodine g. xx. ter in die.

5th.—Much as last report.—Nit. argent. app. mane et vesp. ; Cont.

8th.—No improvement.—Cont.

9th.—Much better.—Cont.

12th.—Sore looks well but shews no inclination to close.—R. ung. simp. ℥j. hydriod. potassæ ℈j. m. app. to the sore. Alia Remed. cont.

13th.—Much as yesterday —Cont.

14th.—Cont.

17th.—No improvement.—cont.

20th.—Has had discharge of pus for last two days of a thin kind from the testicle ; sore is much as last report.—Ungt. Hydriod. potassæ cont. Tinct. Iodine Cont.

21st.—Much as last report.—Cont.

25th.—Considerable inflammation of the scrotum; sore continues without much progression in any way.—Cont. Hirudinis xij. scrot. appr.

26th.—Inflammation not diminished by leeches; complains now of pain in the left testicle. —Hirudinis xij. p. appr. alia meda. cont.

27th.—Inflammation reduced by leeches ; left testicle much better ; bowels being irregular took three purging pills last night.—Meda. cont. hs. mist. sennæ ℥vj.—*Omit beer 3 ms. Port.*

28th.—Cont.

29th.—Cont.

31st.—Cont cataplasm.

Feb. 1st—Cont.

2nd.—Considerable redness and tumescence in right testicle ; sore, not improved. —Ungt. hydriod. potassæ demitt. appr ungt. ox. hyd. rub. tinct. iodine cont. ht. suspensary bandage.

3rd.—As yesterday.—Cont.

4th.—Pain in left testicle and considerable redness below ulcerous opening in the right one.—Cont. ht. hirudines xij p. d. appl.

5th.—Much better since leeches were applied ; bowels confined.—Cont. ht. mist. sennæ ℥vj.

6th.—Cont.

7th.—Cont.

9th.—Much as last report.—Cont. et catapl. bis die app.

Vespere.—Sèvere pain in the diseased testicle and enlargement of the left. V. Hirudinis xij. p. dol. app.

10th.—Pain relieved by leeches ; bowels confined.—Cont. Ht. mist. sennæ ℥ij.

11th.—Severe pain in and great enlargement of left testicle ; opening in right testicle nearly closed.—Hirudinis xx. p. d. app. et postea Foment. pap. somnif. dressing and catapl. cont.

12th.—Much better since leeches and formentations were applied.—Cont.

Vespere.—Is very sick to-night, and bowels confined.—Ht. Pil. Cal. c. Colocynth no. iij.

13th.—Bowels purged and feels much better of sickness, but pain in the left testicle much complained of.—Hirudinis xij. p. dol. app. Ht. mist. sennæ ʒvj. Alia Meda. cont.

Vespere.—Has not been purged during the day and is still sick; small relief from leeches.—Ht. Pil. Cathart. no ij.

14th.—Complains of pain in the groin which occasionally affects the whole length of the left lower extremity.—Hirudinis xij. p. d. app. Foment cont. Alia Remeda. cont.

15th.—Severe pain in the testicle which was not relieved by leeches.—Hirudinis xij. p. d. app. alia. meda. cont.

Vespere.—Patient worse.—V. Hirudinis xx. p. d. app. et postea catapl. app.

16th.—Testicle much better this morning, pain less; swelling somewhat gone down.—Hirudinis xx. p. d. app. Alia remedia cont.

17th.—All pain gone from left testicle, but swelling continues; right side healing up—Remedia Cont.

18th.—Improving.—Cont.

25th.—Continues to improve.—Cont.

26th.—Testicle of the left side much enlarged; sore of the right side again irritable.—Hirudinis xx. app.

27th.—Testicle continues enlarged and was relieved yesterday by leeches; bowels irregular.—Ht. Pil. Cal. c. Colocynth no. iij.

Vespere.—Great redness of the scrotum and enlargement of the testicle; tongue foul and bowels have not been purged.—V. Ht. mist. sennæ ʒvj. Hirudinis xx. scrotum app. et postea foment: Haust. Anodyne at bed-time.

28th.—Was freely purged during night, and is generally better this morning; Papav: som: app. leeches were applied and gave great relief.—Emp: Adhæsiv Cont. Tinct. Iodine Cont. Aq. Lythay, scrotum app.—*Diet*—milk, soojee, and 3 meas. of port.

March 1st.—Sore continues to look irritable; swelling in the left testicle much diminished; scrotum red and inflamed looking; patient's bowels are regular.—Hirudinis xx. scrotum app. Alia Remed. Cont.

2nd.—Swelling gone down since leeches were applied; inflammatory appearance quite gone from scrotum, patient generally better.—Cont. Remed.

3rd.—Sore nearly healed up; patient improving.—Cont.

4th.—Completely healed up.—Discharged.

Having given at length an account of the case as it was treated in the hospital, I beg leave to offer the following observations which occurred to me during the progress of the treatment.

It will be perceived from the case that the opinions of Mr. Cooper and Mr. Lawrence were consulted, and their modes of practice fully acted up to, without being attended by any permanently beneficial result. Although the application of the caustic diminished the size of the tumor for the present, yet at the next dressing, the swelling appeared to have increased beyond its former bulk, and I at length discovered that the part destroyed by the escharotic was more than compensated by the increase of excitement, and consequent evolution of the tumor: I was therefore obliged to discontinue its application except at intervals, and have recourse to remedies of a less irritating character. The application which I found to answer best was the ointment of hydriodate of potass: after levelling the tumor with the scrotum, the ointment was applied and over it a piece of lead wrapt in lint, and the whole secured to the scrotum by adhesive straps. By this means the protrusion of the tumor was opposed by the external pressure and the edges of the opening forcibly drawn towards each other, although from the adhesion of the tumor to the inner surface of the scrotum, they could not be brought completely in contact. At the same time, iodine, in the form of tincture, was administered internally, with a view of assisting the local application by increasing absorption, and I have every reason to believe that it operated as a powerful auxiliary: the gradual recession of the tumor followed, and a complete cure was at length effected.

Whatever may be the advantages attending Mr. Cooper's and Mr. Lawrence's plan generally, of levelling the fungus with the scrotum and afterwards applying escharotics, it was evidently of very little benefit in this case, as the tumor was levelled several times without shewing any disposition to mend, till the means above mentioned were resorted to.

At one period of the complaint when the left testicle became affected, it was proposed to me to extirpate the diseased one, lest both testicles might become involved, but having some reason to think that the usual means would subdue what appeared to be only a temporary excitation, the operation was deferred, and afterwards from the favorable turn of the symptoms, and improving appearance of the sore, found altogether unnecessary.

I saw the subject of the case several months after he was discharged from hospital, in the enjoyment of good health, and suffering no inconvenience whatever from the disease which so long had affected his testicle.

ON INJURIES OF THE HEAD WITH NOTES OF SOME CASES.

We beg to direct the particular attention of our readers to the following able paper on clinical practice in injuries of the head.

By Dr. Mackinnon of Tirhoot.

I do not know that it is the case in all the districts of the country, but in this one I have many examples of injuries of the head. They happen during the affrays which so frequently occur in boundary disputes, between the ryuts of different and sometimes even of the same villages. The weapons they use are the talwár and the láṭhi. And they use them in truth with a force that is often fatal at once, and that generally leaves serious consequences behind it. Scarcely a month passes that I have not bodies brought in for examination, and I usually find the cause of death to be fracture with compression of the brain. I have seen many cases however of death without depression or even fracture, and in such cases the morbid appearance is usually a sanguineous effusion often seen upon the opposite hemisphere of the brain to that on which the blow has been struck. Whether it is that they use it more gently I cannot tell; but the injuries from sword-cuts are, I think, much less dangerous than the láṭhi wounds; and with the sword the arms and chest are the parts usually injured. I have seen several cases where the two tables of the skull have been fairly cut through without a bad sympton.

A body was once brought to me with a letter from the Magistrate, and calling my attention to a deep wound in the thigh as the probable cause of death. On inspection I found that this sword-cut had divided the circumflex artery of the thigh; but not being satisfied that this wound could have caused so free a hemorrhage as to produce death, I opened the head though there was no external mark of injury whatever (and this is often the case) owing to the rapid decomposition of the integuments; and found a large effusion of blood under the middle lobe of the right hemisphere of the brain. The injury to the skull was on the opposite side splitting the inner table of the parietal bone several inches: this man was said to have been cut down by the sword wound in the thigh, and to have bled to death; but here was proof to the contrary, and he who struck him on the head was the murderer.

Some years ago, I had a very interesting case of injury of the head, in which there was much difficulty to distinguish between the symptoms of compression and those of concussion. A man was brought insensible, with a slight wound on the head, and on first applying the hand it appeared as if the skull were depressed. This was however owing to the state of the scalp—for the skull was not depressed from without, which I ascertained by incision.

It was however extensively fractured; for the two parietal bones being moved gave an extensive crepitus. The man was perfectly comatose—lying still and motionless until roused briskly, when he rolled about a little, tossed his arms, and then sunk again into repose. The pupils were neither dilated nor much contracted, and mobile. The breathing was almost natural, but slower than usual; the pulse was full and somewhat quickened; I almost trepanned this man, and there was much difficulty in getting any information from his attendants. They avowed that he had fallen into insensibility instantly on receiving the blow. This was probably the case, and when concussion is violent, it may produce symptoms of coma as soon as depression; the symptoms of increased action, the want of stertorous breathing, and the state of the pupil were what induced me to think that this was a case of concussion; and to treat it as such I had recourse to free bleeding from the arm, and by leeches: purges were also given assisted by injections. The man recovered completely; but long after his senses were restored the power of speech was wanting.

The worst case of injury of the head I have ever seen was that of an unfortunate jockey of Captain Gwatkin's, named Mungo, and well known as a noted rider, with judgment and hand that few natives have ever been known to possess.

The unfortunate fellow, after having conducted himself most correctly during the races at Hadjeepore in 32, had after their termination, like a sailor off a voyage, made up for lost time by getting drunk. He came home reeling to his stable, and one of the horses having attempted to bite him he went behind to punish it when the brute lashed out and took the poor fellow right on the forehead: I saw the man a few minutes after. There was a deep bleeding wound over the left eye almost in the medial line; using the finger I could not discern any depression of the bone—(by the imperfect light of a stable lamp) and there were no symptoms of compression. The man was dead drunk, and spoke wildly and incoherently. This was about 12 at night, and in consultation with another medical gentleman who did not think that the bone was depressed. We resolved to do nothing further until morning than bringing the wound together with stitches. When I saw the man next morning, symptoms of compression were well marked, and having opened and carefully examined the wound I observed that the skull was at one part perfectly comminuted and the depression so

extensive and therefore so gradual that it was not surprising it should have escaped notice at first.

In consultation with Drs. Muston and Sawyers and Mr. C. Mackinnon it was resolved to have a large bleeding, and to send express to Dinapore for Trepanning instruments. After having bled the man profusely I removed some pieces of fractured bone by which. I was able to get a small bullet forceps under the depressed bone. Using the undepressed part just over the orbit as a fulcrum, I succeeded in elevating the depressed bone indeed the whole left side of the forehead. I shall never forget the effect produced. The breathing became natural, the countenance assumed an aspect of tranquility—the pulse lost its compressed feel—but these changes in the symptoms were quite transitory, and soon they were worse than before. The elevation of the bone enabled me to discover that the brain was extensively injured by the fractured spiculæ of the inner table.

These spiculæ I removed, a part of which consisted of the Cristi-galli. The brain could be seen palpitating distinctly—there was no external hemorrhage but portions of the brain passed out through the skull. It is hardly necessary to add that death soon closed this scene. Poor Mungo's last race was run.

Nothing could have saved this man, I suspect after the dreadful injury the brain had received, but the case is interesting as shewing that when there is depression of a large portion of bone, the fact is not so easily discovered as when the depression is confined to one small spot. It is an instance too wherewith the presence of immense depression and læsion of the symptoms of compression were not immediately present.

I have been induced to offer these general and unstudied remarks on injuries of the head, from having had several cases in hospital during the last few days. In one case violent inflammation attacked the scalp: matter had formed ere I saw the case; but there was still a great deal of that low fever which accompanies erysipelas. I made free incisions to evacuate the matter, applied cold lotions to the head and acted on the bowels with Tartar emetic and Epsom salts. This treatment had the most fortunate result, for the man has recovered most rapidly and is now out of danger. In a second case the os frontis was penetrated for some lines in depth by a sword-cut. The case was of little interest as there were no cerebral symptoms. In these cases as the periosteum receives little injury the healing process is naturally rapid.

The third case is I think of considerable interest. Heera raee injured in the same affray with the cases above mentioned. The following is the substance of my report to the Magistrate. The lower jaw broken by a blow of some blunt instrument other blows on the body no bad symptoms on admission into hospital. This man had a dose of medicine and his jaw was bound up with a bandage. There was not a symptom of the brain having been injured in the slightest degree nor did any appear a week afterwards. On the 9th instant he shewed symptoms of delirium by talking wildly at intervals there was no violence in the symptoms, 30 leeches were ordered to the head Hab. Pil Calomel et Ext. col. comp. No. ii. statim, at post horas quatuor solution sulphate magnes. c. l. Antimon tart. ℥ ij. quarter quaque hora. A cold evaporating lotion to be kept constantly applied to the head. To have the lowest possible diet.

10th.—6 A. M. seems again quite free from bad symptoms. The pulse which was full and bounding is now natural; answers questions quite rationally. A large blister to the nape of the neck.

To be watched closely and leeches applied again if necessary.

11th. Goes on well.

12th. Has again been delirious with other symptoms of increased action in the head. Leeches have been applied and have again subdued the symptoms. There appeared to me a degree of wildness in the man's look; but he is quite rational and comfortable. The opening medicine to be continued three times a day with three grains of calomel and three of antimonial powder in the evening. For two days more there was no change, but on the morning of the 15th I found the man comatose with tremblings of the limbs. Blisters were repeated on the neck; sinapisms to the feet and boiling hot water, injections, and purges; but the man died on the morning of the 16th.

The following appearances presented themselves on dissection.

Much general vascularity in the substance of the brain on removing the dura mater. On the upper surface of the brain no morbid appearances. The ventricles also healthy. They were opened by the usual incision parallel with the corpus collosum, separating the brain gently from the dura mater, so as to get a view of the base of the skull. I discovered an extensive abscess situated in the right middle lobe taking its source from the part of the brain lying over the Sella Tursica which was fractured in several places without any considerable displacement. There was no inflammation of the membranes here; the morbid læsion being confined to the cerebral substance and the numberless nerves that pass out and take their originat this part of the brain were uninjured by the accident or the disease that arose from it.

Since I penned the foregoing remarks, I have had another case of injury of the head. A woman was wounded lying on the banks of the river near Hajeepore speechless, with her jaw fractured and with a very severe cut on the head, but without any fracture of the bone. The injury from the state of the wound must have been inflicted about a week before. She was quite comatose, but without any febrile symptoms. The face was however much collapsed, and there were convulsive twitchings of the limbs. She lingered for several days, and on dissection a great part of the middle lobe on the left side of the brain was found reduced to a soft jelly-like mass, without any appearance of increased vascularity.

In the above remarks I have purposely avoided making learned references to cases or authors.

All I have now to observe in conclusion is, that in cases of injuries of the head occurring to natives less danger is to be apprehended from increased action, than in the European patient; but I think on the other hand that hemorrhagic effusions will ensue and prove more dangerous from a slighter cause. As for the external inflammation of the integument so common in injuries of the head, in Europe, it is in natives extremely rare—and is more easily subdued.

R. Mackinnon, *M. D.*

Tirhoot, June 10, 1835.

We beg to refer our readers to the May number for the first part of the following case of Lithotomy by Dr. Mackinnon, Tirhoot.

DR. MACKINNON'S CASE OF LITHOTOMY.

(Continued.)

May 8th. I shall not trouble you at much length, on this case. The issue of it has been successful, after a most tedious progress to recovery. For some weeks indeed, the poor little fellow's life seemed to hang upon the balance, of a hair between life and death. There were no violent symptoms consequent on the operation, but the intestinal nutrition was difficult to be subdued, and after it was even, there was a long interval ere decided amendment took place.

My last report goes up to the 5th March, being the 3d day after the operation. By the administration of doses of rhubarb and calomel, made up in an electuary with some drops of laudanum and honey, and sometimes combined with doses of the compound powder of chalk, the diarrhœa gradually disappeared in about ten days after the operation. All the while the boy's appetite was most wretched, and the wound remained in an open gaping state, the urine flowing freely through it occasionally small quantities of liquid fœces. I administered small doses of the sulphate of Quinine with benefit; but neither from reading nor in practice have I known of any case where improvement was so very slow. Numerous other calls have prevented my keeping a daily report of the case, so that I must content myself by stating that it was not until nearly the middle of April that much or decided amendment of the general health had taken place, at the same time the wound had considerably filled up, and the fœces had almost ceased to pass through it. Up to this time no urine had yet come by the penis but soon after it began to pass by drops and at this date (the 8th May) the following is the boy's state. He has taken on flesh and looks lively and healthy; urine passes pretty freely through the urethra; but the wound in the perineum is still open though I hope healing apace. It discharges drops of urine occasionally but no fœces nor does urine come by the rectum, so that I hope the wound of the gut has closed.

THE INDIA
JOURNAL OF MEDICAL SCIENCE.

CALCUTTA: SEPT. 1, 835.

We have among our subscribers some of the Literati of India, who are not Medical men. We beg particularly to draw their attention to Dr. Graves' lectures among our selections, as well as to another by the same Gentleman which appeared in our July number. The information these lectures afford is not only interesting but valuable, exhibiting at once the true character of a Medical man's studies and proving how much that study enlarges and strengthens the powers of the understanding, and fits it for the task of conducting important affairs, not only in the Medical, but also the Political as well as the moral world. We wish we could convince the Government of India of this fact, and that it has upwards of eight hundred talented Civil and other Surgeons who instead of having their sphere of duty limited to attending half a dozen sick in a hospital attached to a petty jail or a crippled regiment of sipáhis, might be employed in a more extensive manner, especially in occupations which tend to ameliorate the condit-

on of the unenlightened people of India, and thereby benefit the state and the country. The people of India are neither morally nor physically averse to improvement. What then should prevent a course of systematic instruction in the higher branches of Moral Philosophy and Political Economy being imparted to them throughout India, and thereby infuse a spirit for trade and manufactures, opening a spring for the diffusion of wealth, inspiring a spirit of emulation, and forming habits of industry. But Medical men may be placed so as to interpose and prevent the tyranny and extortion now going on owing to the exclusive employment of native agency which for want of European check exercises unbridled power. The mischievous consequences of these evils are calculated to perpetuate a state of things so oppressive as to retard the progress of wealth both to the state and to the people, and unless remedied by better policy than that hitherto pursued, we sow the seeds of irritation and discontent in the hearts of our native subjects, which must be developed in scenes of violence, anarchy, and distraction, if not repressed by force. But in all countries where the administration is such as to infuse knowledge, happiness, and contentment, military force is found to be as unnecessary as it is burthensome and ruinous. Is it not evident then that such means ought to be employed in the Government of a country like India as may eradicate these evils without violent measures, and establish our rule in the affection rather than the fear of the vast multitude whom Providence has placed under our controul ?

MEDICAL AND PHYSICAL SOCIETY.—We were sorry to observe, at the last meeting of the Society that some members were still opposed to the publication of the discussions which take place at its meetings. The objection started by Mr. Twining we were prepared to expect. Our worthy colleague's conservative principles are well known : his opposition to the introduction of a reporter to take down the valuable information elicited during the debates of this Society to be circulated throughout India, display, to say the least, straight forward consistency. We were sorry however to find Mr. Egerton taking the same view of the subject, and maintaining that the papers forwarded to the society were private property. But how documents, intended for the transactions of the Society and to be discussed at a public meeting of its members, can be called private property we cannot conceive, especially when these very papers after the lapse of a few months, will be published and submitted to us for review. But allowing Mr. Egerton's position that they are the property of the Society, he cannot deny that they are given by their authors through it to the public, and it is for the benefit of the public that we seek the fullest possible information upon them, by publishing the discussions they occasion.

Mr. Twining says that it is not customary in London to publish in the *Lancet* and other Journals the discussions at the meet ings of the Medico-Chirurgical Society. In our opinion it is foreign to the question to draw a comparison between Calcutta and London where there are so many separate Societies for the purpose of discussing Medical subjects and which are published in the periodicals to which Mr. Twining alludes. Were the Medico-Chirurgical Society in London circumstanced as the Medical and Physical Society in Calcutta is, we are satisfied there would be no objection made to a reporter taking down the discussions : on the contrary in that glorious land of free publication, the proposition would meet with the greatest encouragement such as we expect from our brethren here. Indeed we are satisfied that the Medico-Chirur. Society of London would have no objection to the publication of its discussions, and Mr. Twining can produce no document to prove the contrary.

But Mr. Egerton says that the admission of a reporter at the meetings will prevent discussion : that the effect at least on him would be to stop his mouth. We have never yet seen the admission of a reporter, at any meeting we have been at, restrain

speakers from fully expressing their sentiments; and we think much value could hardly be set upon the observations of any one who would be fearful that they should see the light. It is however incontrovertible that they can scarcely be said to produce any good, if the promulgation beyond the sphere of the speaker's presence be forbidden, and it is obvious that there could be no occasion at all for public meetings for the purpose of private discussion on papers considered private property which could, as well be accomplished by leaving the papers to be selected for publication and discussion by the Managing Committee. The resident members might keep themselves as most now do, at home more profitably engaged, for they would reap all the advantage that is to be gained from them when they were published.

In short we are fully convinced, that when men speak for public information instead of mere private amusement, there will be well digested opinions, sound arguments, and measured language, such as to give life to the meetings and attract all the members of the society together, and thus strengthen the claims which this noble scientific institution has upon Medical men and which has redounded so much to the honor of the Medical Profession in this country.

But how is it, we would ask, that the most talented and experienced medical practitioners in this city are never present at the meetings of the Society and that others have seceded from it altogether. There must, it is supposed, be something wrong. Every friend of the Society must therefore desire to see by a free publication of its proceedings whether the supposition be correct or not.

If any question could possibly shew the necessity of a reporter of the proceedings, it is the information which was given by Dr. Stewart. This information of the incursions of an epidemic may be communicated during the course of the discussions; but by the logic of the opponents of publication this intelligence is to be considered private property, and never to be brought before the public. It is however to be hoped that this will not be the case, and that our proposition will be carried.

Before we conclude our observations upon the subjects discussed at the last meeting of the Medical and Physical Society, we are compelled to advert to the remarks which fell from Mr. Hutchinson. He seemed to think that we were likely to be partial to our own sayings in reporting the discussions, and added that our report of his speech was incorrect. Now if Mr. Hutchinson judges from a comparison of the abstract he gave of the proceedings in the daily papers and our report he may be right, seeing that the abstract was so wanting in matter produced at the meeting and which occasioned the discussion, that we wrote to him for a perusal of the original document; but we were, after the exchange of one or two notes, told, that Mr. Twining the author of the paper had sent for the original document; and were furnished in lieu of it with the abstract only, which appeared in the papers; so that, at that time, the original document was not in the possession of the Secretary of the Medical and Physical Society. Mr. Hutchinson says that we reported that he had said, he preferred giving bark to quinine in fever; but if he refer again to the journal and read the passage with more attention, he will find we have reported no such thing.

MEDICAL AND PHYSICAL SOCIETY'S MEETING.

Saturday, August 1, 1335.

Dr. N. Wallich, F. R. S. in the chair.

Mr. Hutchinson has, at our request, obligingly favored us with the proceedings of this month, by which we are enabled to lay them before our readers*. G. Paton Esq. was elected a member and the following gentlemen were proposed as members, D. Trail, J. Humlyn, H. R. Bond and H. R. Bousfield, Esquires. Dr. R. Brown the celebrated botanist was elected an honorary member. A letter was read from Mr. Bell of Almorah giving a description of two cases of urinary calculus both of which were operated on, one

* Previously only the daily papers used to be favored with a copy.—EDIT.

by the lateral operation. The calculus in the second case was impacted in the urethra from which it was extracted, and both cases were successful. A note was read from Mr. Beardsmore describing the beneficial effects he had experienced in an ashmatic attack from smoking the dried flowers of the Mudâr. Two tracts on the Nuth grass and the Mudâr or Calotropis Procera were presented by their author, Dr. Wright of the Madras Establishment. Also Seales work on the Geognocy of St. Helena by Dr. MacRitchie of that Island. An urinary calculus was presented for the museum by Dr. Bell. The following communications were likewise presented A statistical account of St. Helena, by Dr. MacRitchie. An account of two cases of cholera successfully treated by tartar emetic by Mr. Chapman of Purneah, also, a notice of a case of cholera treated in the same manner successfully by Mr. Foley. The history of a fatal case of extensive disease of the spleen by Mr. Eccles. A description of the electro magnatic hemisphere constructed by Dr. R. Tytler with a model of the instrument. A printed account of the calculo: Tractor of L'Estrange ☞ "*there are several sets now on their way out for the use of the Medical department of this Presidency.*"

The discussions of the evening commenced by Mr. Hutchinson, rising to observe that he thought the members of the society on the Madras and Bombay Establishments might be furnished with a report of the proceedings of the Society by desiring one of the newspapers in which they were reported to be sent to those members.

Mr. Corbyn begged to remark that as the charge of postage on pamphlets of a certain weight and newspapers were the same, he had learnt by the circulation of the *Medical Journal* that the postage to Madras including the charge for the Journal amounted to four rupees and that would be the charge of a newspaper. Mr. Hutchinson said that he had sent a letter to Madras which was charged only at seven annas now as newspapers went cheaper than letters he could not understand how the newspaper could be charged at so high a rate as mentioned by Mr. Corbyn,* and he Mr. Hutchinson took that opportunity to notice that Mr. Corbyn had reported the discussions of the Meetings in the Journal, not that he had any objection to a reporter being admitted but he had to Mr. Corbyn himself taking down notes, as he was likely to be partial in giving his own speeches. Mr. Corbyn had expressed different sentiments at that meeting on purgatives to those stated in the Journal. Mr. Corbyn had also mis-stated what had fallen from him (Mr. Hutchinson.) It was said in the journal that he had recommended bark in fever in preference to quinine;—a statement he had never made. Mr. Corbyn said that in respect to what appeared in the journal it was taken down at the moment, and when copied out was read over to a gentleman present at the meeting who declared the report to be correct: but Mr. Hutchinson who was then speaking only from recollection was likely to be wrong.

Dr. Stewart rose and said that before proceeding to the ordinary business of the evening he would beg permission to state to the meeting that within the last few days several cases of cholera had occurred in his river practice, and that two patients in hospital convalescent from fever had been attacked with the disease. All the cases, five in number with one exception were seamen recently arrived from Europe, men of large size, and loose lymphatic temperament, North countrymen, with flaxen hair, fair complexion and light colored eyes.

The character of the disease was more that of the *blue cholera* of Europe than the spasmodic cholera of the East, there was intractable vomiting, and continued purging of congee stool with protracted collapse and no reaction in one fatal case.

In the other death took place at the end of the 2d day from collapse, after healthy secretion had been procured.

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* Our readers will find this explained in our last number under the article "NOTICE TO SUBSCRIBERS."—ED.

He thought it well to mention these circumstances in a conversational way at a meeting like the present, notwithstanding the presence of

"A chiel among them taking notes. An' faith he'd print them"; because he thought that the earliest notice should be taken of the approach of such an enemy in order to be prepared for him. And he felt anxious to know, particularly from those connected with other hospitals whether any such proclivity to cholera had shown itself in Calcutta. Last year at this time the tendency to cholera was such that many practitioners were afraid to purge a patient, lest it might be brought on.

Mr. Twining rose and said that he had no objection to the discussions of the Society being reported, but that it was not consistent with the nature of the Society to report them. He said if we look to the *Lancet* or other periodical Journals we would find that the discussions of the Medical Chirurgical Society were not reported in them, (Mr. Twining had moved to the opposite side of the table to that on which we sat and spoke so low, that we could scarcely hear him, but we understood him to say) that the late Dr. John Adam would have objected to a report of the discussions at the meetings of the Society, being published in a Medical Journal.

Mr. Corbyn considered the subject now discussed to be irrelevant to the subjects which the Society had assembled that evening to discuss; he should therefore, in accordance with the regulations, announce that at the ensuing Meeting, it was his intention to lay before the Society a proposition for the admission of a reporter to take down the discussions at the meetings of the Society for publication.

Mr. Egerton said there were two propositions before the Society. He considered that all which was said at *these* meetings of the Society was private, and that every paper sent to the Society was private property. He said that the admission of a reporter would meet with his opposition, for he conceived it would have the effect of checking the freedom of discussion, and would certainly stop his mouth for one.

Mr Hutchinson then proceeded to read a case of Ranula, by Mr. Malcolmson Secretary to the Medical Board of Madras, the following is Mr. Hutchinson's abstract.

"Mr. Malcolmson's case of Ranula occurred in a sickly looking Hindu boy of 9 years of age, who was brought to Chicacole from an unhealthy hill district. The swelling was quite soft and evidently contained a fluid; it extended from ear to ear, over the angles of the jaw, and to the sternum over the top of which it had a slightly pendulous appearance. The disease was of a year's standing and appeared to have commenced below the jaw a little to the left of the chin. Sometime before its appearance there had been a discharge of pus half an inch behind or laterad of the mouth of the left submaxillary duct, near which situation there was a carious tooth. On the cessation of the above discharge the swelling commenced, a small quantity of saliva still passed by the duct; and there was no tumor in the inside of the mouth; hardness however could be felt below the jaw in the direction of the duct, over which there were several scars from the application of the cautery. From these circumstances Mr. Malcolmson concluded that the duct had become inflamed from the irritation arising from the carious tooth, that the flow of the saliva had become obstructed in consequence, and finally that it had been effused into the cellular structure of the throat. A tentative puncture was made into the tumor, and 20 ounces of a glairy brownish liquid evacuated, after which a hard moveable substance could be detected within. This was removed and proved to be a portion of the fluid, which had become inspissated. Adhesion of the sides of the sac afterwards partially took place above; but the discharge of matter was not free, and it had in consequence to be pressed out daily. Mr. Malcolmson now lost sight of the patient for a month or too, after which he again made his appearance. The opening had closed a new puncture was made in consequence, and several ounces of liquid of a lighter color were discharged, after which a tent was introduced, which caused some irritation, but it was soon manifest that little could be expected from this plan. Mr. Malcolmson accordingly determined to remove a portion of the front of the sac, to ascertain if the liquid came from the gland, and afterwards take such further measures as might appear necessary. This was accordingly done. The throat exhibited an extraordinary appearance. From behind the ears, over the angles of the jaw;

and down to the chest it seemed as if carefully dissected, the blue veins and parotid glands shining through the cellular membrane, after much careful examination a round body of the size and color of a lymphatic gland was observed partly imbedded, as it were, in the submaxillary gland, and having a minute aperture in it, through which a little glairy fluid could be pressed out. Mr. Malcolmson now immediately proceeded to separate the gland from its connexions. This at first was not difficult; but became much more so, as the dissection became deeper. This was in some measure remedied by passing a ligature through the gland, by which it was drawn downward. The lower maxillary artery was divided, the bleeding from which was commanded by pressure on the carotid; but the vessel could not be secured until an assistant introduced his thumb into the mouth and depressed the gland, which step greatly facilitated the remainder of the operation, afterwards by passing a curved needle several times through the parts and cutting between the gland and the ligature, the whole was removed except a small process, to which the actual cautery was applied. The operation occupied a considerable time from the flow of blood and the intricacy of the dissection. The wound did well; but was followed by abscess which burst into the mouth by the old cicatrix. It occasioned but temporary inconvenience and the patient was well in about a month after the operation. Mr. Malcolmson in his observations on Ranula has particular reference to the opinions of the late Baron Dupuytren, from the accuracy of which he is inclined to dissent. In the concluding portion of his paper he takes occasion to advert to the anomalous symptoms, occlusion of the salivary ducts, and fistulous openings, which not unfrequently take place from carious teeth and which of course can only be expected to be cured, by the removal of the source of irritation."

Mr. Egerton said he would like to know whether Ranula was common in this country: he had never seen a case. Henry Cline he recollected had one: that Surgeon heard of a man croaking, and found it was a case of Ranula Mr. Twining thought he recollected a case like Cline's; the tumour was under the tongue, and he believed it was removed. Mr. Twining doubted whether the case now before the Society was a case of Ranula; he proceeded to define a case of Ranula, and concluded by observing that it was easily relieved by puncture. Owing to the low tone in which he spoke we experienced grea difficulty in noticing the latter part of Mr. Twining's observations; but we understood him to say that the disease was under the tongue and about the angle of the jaw, about the sublingual glands, the fluid was glairy in an extensive sac; and he then compared this case with Mr. Malcolmson's to prove that Mr M—'s was not one of ranula. We understood Mr. Twining to state that the sublingual glands, in the case to which he alluded had been extirpated in the operation, a vessel had been divided, and there was an amazing loss of blood: the vessel was secured however.

Mr. Hutchinson said, he might mention that the English and American Surgeons treated ranula by the application of caustic.

Mr. Egerton begged to state, a fact, that of the salivary duct being wounded a fistulous opening was inevitably the consequence, and was not to be healed. He recollected that it was once tried to be healed by introducing a sponge compress brought through the opening near the parotid gland.

Dr. Spens said he had seen several cases of ranula cured by Mr. Liston with setons, and stated that he had under his care at that time a case of ranula in a native.

Mr. Twining concluded the discussion by adverting to Mr. Egerton's observations on the use of compress for the cure of fistulous openings, and described how lead had been introduced for the same purpose.

Mr. Hutchinson then proceeded to read notes on the Mishme Teeta and Pucha Pat by Dr Wallich and a memorandum on its medical qualities by Mr. Twining. The following is Mr. Hutchinson's abstract.

Dr. Wallich in his paper states that about a year ago he received from Captain Jenkins the Commissioner in Assam a small supply of a Medicinal root which subsequent information derived from Lieut. Charlton of Suddeya has enabled him to identify with certainty. The Mishme Teeta is the name by which the drug is known among the Mishmes and Lamas; by the Chinese, to whom it is likewise well known, it is called Hong Lane. The root is of the thickness of a crow quill or somewhat larger, is dry and brittle; scabrous and grayish outside, and cellular and of a dirty yellow color internally. It is imported into Assam, packed

in quantities of abont an ounce each, in small rattan baskets composed of open meshes, apparently to protect the medicine from contact with the hand. The taste is intensely and almost purely bitter, having very little aroma. The root is destitute of smell and imparts to water a bright yellow or golden color in infusion. In march last Dr. Wallich received fresh roots of the plant from Lieut. Charlton, and these fortunately, notwithstanding the dissimilarity of the climate, promise to grow if not to thrive in the Honorable Company's Botanical Garden. According to Dr. Wallich the plant is a species of coptis, a subdivision of the Ranaucnlace, and called Helleborece. To the generic name abovementioned Dr. Wallich has added the trivial one of Teeta. Of the other two species of coptis mentioned by Dr. Wallich, the coptis trifolin of North America, would appear to have a considerable affinity in medicinal qualities to that under consideration, and is more extensively used in some parts of that country than any other bitter.

The other vegetable production to which Dr. Wallich directed the attention of the Society is the Pucha Pat. This dried leaf is to be fonnd in almost every bazar throughout Hindoosthan, and is used extensively for imparting its fragrance to Tobacco for the Hookah, likewise to the persons and apparel of the natives. Abont two years ago, Dr. Wallich ascertained that a large quantity of the leaf had been imported from Penang, and he in consequence addressed his correspondent at that place on the subject Dr. Wallich not only received the information he required in reply, but several growing plants which have since been found to thrive luxuriantly in the Botanical Garden. The Pucha Pat grows wild at Penang, on the opposite shore of the Malay Peninsula, and in Province Wellesley. It is exported in great quantities, principally by the Arabs, and sells at Penang for somewhat upwards of a dollar per pekul, and in Calcutta at from six to twelve Rupees per maund.

The Pucha Pat is of the family of Lobiatœ and forms a shrnb in the Botanical Garden of from 2 to 3 feet in height ; according to Baron Hogal a plant very smaller to it, if not the same, is found growing wild at Canton Dr Wallich is inclined to think that the Pucha Pat, if not the Marrnbium indicum of Burman, is very closely allied to it.

Mr. Twining in his memorandum on the medicinal qualities of the Mishme Teeta states, that the powder of this root is of an intensely bitter taste accompanied with a slight degree of aroma. It would appear not to possess much astringency and is not much affected either in tincture or intnsion by a solution of the snlphate of iron. Four hundred and eighty grains coarsely powdered lost, by maceration in proof spirit for five days 180 grains, and the remainder when macerated for 30 hours more in distilled water only 26 grains.

The medicine in powder and tincture was tried in seventeen persons, and appears to be highly deserving of attention. It was used principally in debilitated persons, who were recovering from acute diseases, and in one person who was greatly reduced by extensive snppuration of a strumous character.

The effects of the medicine as a bitter in restoring appetite, and in improving the digestive powers are very remarkable, and not inferior to those produced by our best bitter tonics. It has seldom appeared to produce constirpation ; but in this and many other respects, Mr. Twining considers farther trials to be required to enable us to speak with accuracy and precision.

SELECTIONS.

LECTURES INTRODUCTORY TO THE COURSE OF THE INSTITUTES OF MEDICINE.

Delivered by Robert J. Graves, M. D., King's Professor, Dublin.

LECTURE II.

Gentlemen,—I spoke yesterday of the extent of life, and showed you, that not only do we find earth, air, and ocean peopled with myriads of beings, but that a great proportion of the solid crust of the globe is composed of the infinitely numerous remains of those animal vegetable tribes which existed in remote ages ; to-day I shall endeavour to explain the position of man in the scale of life, and for this purpose shall read part of a former lecture, after which I shall consider the very interesting subject of the influence of physical agents on vitality.

First, then, with regard to the formation of man and the rank he occupies. In her operations on inanimate matter, nature pursues a system, which gradually rises from what is simple to what is complicated ; in the organisation of living beings the same law is universally observed. In the lowest tribes we find an organisation the most simple combined with what may be termed the *unit* of life, and, as we ascend in the scale we find that organisation more complicated, and the display of vitality more extensive and more intense.

This law is illustrated, whether, directing our attention to the formation of the living body, we observe the embryo of the most perfect animal from its commencement, and watch all the various and successive changes it undergoes during its pro-

gressive development from its original state of rudimental mucus to that final and complicated arrangement, which consists of tissues so dissimilar in their composition and structure, or of organs exhibiting such an endless variety of shape and texture ; or, whether, turning, from mere matter, we view its actions as influenced by the principle of life, and examine the effects of this new agent, scarcely discernible in the nascent embryo, which conceals the first spark of vitality, but in the perfect *man* not less astonishing as the cause of his corporeal functions, or as intimately associated and connected with the human intellect.

The *physiology of man* includes that of the inferior orders of animals, whether we consider his vital functions, the mechanical arrangement of his tissues, or the chemical composition of his body. In all these points man forms the summit of the series. In him we find the results of a chemical composition the most refined ; in him its products are the most animalised and most varied ; in the structure of his body we observe displayed all the wisdom of mechanical and physical contrivance ; and in him are found all the varieties, all the actions, of vitality, from those inherent in the scarcely animal zoophyte to those performed by the most perfect animal.

In studying physiology, then, we must ascend from the simple to the compound, from the lower orders of animals to the human species. Man was not created at a distance from the rest of living beings, no marked and determinate barrier separates him from the other inhabitants of this world ; he enjoys like them corporeal vitality, and like them his body withers and dissolves under the hand of death. His high degree of organisation is not attained at once ; he commences similar to an animal of the lowest order ; but the human embryo contains within it elements which impel it beyond the first state of vitality ; it assumes a higher form of arrangement and composition, and with these it discharges more numerous functions ; it rises from step to step, and its organs, in the progress of their formation, are analogous to those of a successive series of inferior animals. This I shall have occasion to explain more at large when we come to speak of the development of the fœtus and of human monsters, an important and instructive subject, for the very irregularities of nature often afford the most useful commentaries on her more regular proceedings.

But if our bodily formation is thus connected with the lowest orders of animals, is there naught in man which is peculiar to him ? Does the human species enjoy no particular attribute, no special mark which at once separates and exalts it above its fellows ? Or is man endowed with no quality which ought to rescue him from the humiliating classification of the natural historian and vindicate for him a place apart from the subordinate genera of the mammalia of Linnæus ? Yes, a consideration of the manner in which the human species has obtained a degree of *knowledge* and *power* so much above all other animals will prove, that, although intimately connected with them in bodily formation and development, man is separated from them by a well marked line. The same Power that breathed into man's nostrils the breath of life, infused into him a portion of that divine intelligence, which, although infinitely minute when compared with the omniscience of the source from which it was derived, is yet more than sufficient to exalt him so far above the rest of living beings, that he rises into a distinct class, and by the sole gift of reason is constituted the lord of the creation.

Let us now consider more closely the senses man possesses, and the means by which they have been made subservient to the exertion and improvement of his reasoning powers. Placed amidst an endless variety of external objects, man feels himself excited by an internal impulse to enquire into their various qualities and relations, for the perception of which nature has bounteously granted him senses, few in number, but comprehensive in application. Two of these senses, the touch and taste, are destined for the examination of objects brought within our immediate contact ; while the senses of smelling, hearing and vision, extend the range of our observations, and convey information concerning certain physical properties of distant bodies.

Of these the sense of touch, including taste, which may be considered a modification of it, conveys the most numerous notices concerning the physical qualities of bodies, serving to reveal the flavour, temperature, superficial configuration, general shape, and consistency of matter. The touch, too, is the sense most constantly and unceasingly employed ; for our material bodies always in contact with matter can never entirely escape from its immediate influence, and amidst the silent darkness of night, the senses of smelling, hearing, and vision may lie dormant and unexcited from the absence of their proper stimuli, while the sense of touch as long as we are awake continues its wonted activity. This sense, too, with all its various modifications, and all the varieties of internal sensations to which it gives rise, preserves its relative importance in disease as well as in health and thus forming the chief basis not only of our bodily pleasures, but also of our bodily pains, has been considered of all our

senses the most closely connected with matter. Hence it has been the boast of philosophers to decry its pleasures as sensual, and inculcate fortitude under its sufferings.

Modern metaphysicians, however, seem determined to raise the sense of touch in the intellectual scale, and acknowledging it to be the most extensive, have endeavoured to prove that it is also the most exact of all the senses; and many have gone so far as to constitute it the corrector of the ideas derived from other senses, such as vision; and some have attributed the pre-eminence of man to the exquisite sense of touch with which his fingers are endowed.

When we come to speak of the physiology of the senses, we shall have occasion to examine this opinion more at large, and to prove that the sense of touch is as fallible as the rest. At present it is sufficient to remark, that the various senses have each separate claims for pre-eminence as sources of intellectual light. Thus, vision claims the merit of being intended not merely for the direction and guidance of our bodies or the contemplation of terrestrial objects alone; it requires not immediate contact like the touch, nor, like smell and hearing, maintains a communication with bodies placed within limits comparatively narrow; no; vision, overleaping the bounds of this world we inhabit, carries us information from distances scarcely finite, ranges from planet to planet and from star to star, and seems peculiarly intended by the Creator to intimate to us the infinity of his works.

But let us not, therefore, inconsiderately depreciate the intellectual value of the other senses, or forget what we owe to reason, a gift of the Creator still more precious than even sight. Has the mind of man in its conversation with the heavenly bodies been limited to the sense of sight? Because we have not touched or felt, are we ignorant of all other physical properties of heavenly bodies except their form, as disclosed to us by vision? Has not our reason supplied the place of contiguity, and enabled us to estimate the distance, the relative size, the weight and density of these remote worlds? Do not many other animals possess senses as numerous as man, and do not several enjoy a higher development of particular sensual organs, and possess finer and more numerous instincts than have been allotted to human species. Let us not, therefore, attribute solely to these senses the intellectual pre-eminence of the human race. The sun is not invisible to other animals, nor are the countless stars of the firmament hidden from their view. These objects are seen by them but not understood; they make an impression on their senses, but this impression not becoming the subject of reasoning and reflection, the perceptions admitted through the agency of the senses serve merely for the guidance of their bodies, and are scarcely converted into food for the intellect. And so it was with man in the infancy of the human species, before his reflective powers, aided by experience, enabled him to avoid the errors his sensations would have led him into if implicitly relied on. Although man in his primitive state stood erect, and seemed, from the very position of his body, formed to contemplate the heavens, yet, for ages, his notions concerning what he saw were confined to direct deductions from the testimony of vision. The shepherd remained as ignorant of the distance or size of the heavenly bodies as the flocks he tended; and century after century passed away before man became aware that the stars are not small lucid points fixed on a solid vaulted firmament, before the science of astronomy, while it proved the immensity of this sphere of vision, proved likewise the fallacy of that sense. And so it is likewise with our other senses, for, although they are the original sources of all our acquired ideas, and, consequently, of our knowledge, yet in the first instance they are the most fruitful sources of error. Many of the deductions we appear legitimately to draw from their evidence, a persevering application of our reasoning powers, guided by further experience, afterwards detects to be erroneous, and yet (as in the instance already referred to with regard to vision) so strong and so intuitive appear those primary deductions, that they have in many instances survived for ages, and had not man been created a social being capable of communicating his ideas to his fellow men, it is more than probable he never would have emancipated himself from the erroneous thraldom of his senses, and thus the natural sources of intellectual light would have been converted into sources of intellectual darkness. Happily, however, the power of inventing *sounds* to communicate his ideas, and *signs* to record them—Language and the Art of Writing—have extended the sphere of mental exertion from the narrow limits of individual minds to the collective intellect of the species.

In order justly to appreciate the intellectual importance of the sense of hearing—in order to estimate how much the human intellect owes to language, and the collective exertions of which language is the instrument, it is only necessary to study the progress in knowledge one individual, unassisted by this instrument, is capable of attaining. We need only refer to the intellectual condition of him who, being born deaf, is thus separated from the rest of his species by a double barrier, which, on the one side, prevents him from communicating his own

ideas and sensations to his companions, and, on the other, shuts him out from the benefit of their reflections and experience. It is true he has the use of all his other senses, the other inlets for sensations and ideas are all open; he *sees*, but the various objects which attract his regards and fix his attention are to him a vain and useless show of which no voice affords an explanation. When a child, the deaf man labours under all the errors of childhood; and, when he has become a man, few of these errors have been removed: he scarcely knows that he had a beginning, for this knowledge he could only receive on the testimony of others and suspects not that he is to have an end. The awful word *death* has never sounded in his ear, nor do the forebodings of a future state awaken in him any anxiety. He has feelings, sensations, and some ill-defined, indistinct, natural emotions, but he knows not that others have similar feelings or ideas. He consequently can feel neither the pangs of sorrow nor the consolations of sympathy; he shares not the griefs of his companions, nor unloads his own breast by imparting his misfortunes to a friend. In short, he is completely insulated, his sensations and ideas have reference to himself alone; and, thus circumstanced, he presents the extraordinary spectacle of one externally conforming to the manners and usages of refined society, but who is completely ignorant of human laws, customs, and religion; and what is still more remarkable, he is almost completely insensible to all those affections which form the golden links of the social chain. Compare the condition of the uneducated deaf and dumb with that of the tribes which occupy even the lowest scale among barbarians; compare them with the Guaranis of South America, who, as the apes of their native forests, live in trees, from which, like parasitical animals, they derive both habitation and nutriment, and the comparison will be much in favour of the latter.

Before we turn from this humiliating picture, let me remark that it ought to afford an instructive lesson, not only to the metaphysician and philosopher, but to him also, who, foolishly proud of his own intellectual powers, forgets what a vast portion of his knowledge he owes to one frail sense, by which he has been enabled to borrow from others. It has been truly observed, that the senses of smell and taste seem more subservient to the body than to the mind. A man might be born without either, and yet grow up to attain the most extensive range of human knowledge; whereas, were he born at once destitute of sight and hearing, his body might be matured, but in his intellectual attainments he would scarcely exceed the lowest orders of animals. The loss of these senses in old age may be partly recompensed by the memory or imagination; but the want of them in infancy almost totally prevents even the dawning of the mental faculties.

In the human subject we sometimes meet with very singular instances of malformations, by means of which one or more senses are absent. Thus, in a curious and interesting case by Mr. Davies Gilbert, late President of the Royal Society, it is related of a young lady who had attained the age of seventeen years, but who, shortly after birth, became perfectly deaf, and also blind, that she never acquired anything like the power of voluntary motion. She had never held up her head, raised her hand to her mouth, or set her foot on the ground. Although lean, still she was of good stature. She was never heard to utter anything like an articulate sound, and a feeble cry or whine, the only sound heard from her, was believed to indicate the want of food. In fact, she exhibited proofs of possessing only two out of the five senses—taste and touch—and the latter very imperfectly. Thus, all the avenues to knowledge being closed, her mental development was completely prevented, and she afforded the miserable spectacle of a human being, endowed with animal life and perfect to the eye in bodily conformation, but totally destitute of intellectual development.

Having stated the obvious proposition, that in man the want of the more important senses, as the sight and hearing together, will cause the human mind to sink in the intellectual scale even below many of the lower animals, we should not forget the equally obvious truth, to which, indeed, I have already adverted, that many animals have their senses as perfect as man; and, nevertheless, in mental powers are so far inferior, that they may be considered as placed at an almost immeasurable distance below him. This observation applies to the whole class of mammalia, in many of which the hearing is more acute, the sight sharper, and the smell more perfect than in the human being. The only senses man seems to possess in a greater degree of development than all the rest of the mammalia, are the sense of taste and touch; but we have already seen that this superiority, when, considered with reference to the intellect can be of little importance. Happy had it been for mankind, had their intellectual progress been only interrupted by those natural difficulties that for a time impede, but finally strengthen, the powers of the common intellect. But man is social in his passions as well as in his reason; and the frame of society has been at times so fearfully convulsed by the baneful influence of the former, that more than once has the

human mind retrograded, more than once has night suddenly and unnaturally reappeared, and more than once have ages of darkness returned to brood over the intellectual world, after a period when the daylight, though young, seemed firmly established.

To the historian belongs the interesting task of reviewing the different causes which have contributed to produce the ebbings and flowings, the manifold retardations, and the varying phases of the human mind. It will be sufficient to remark here, that its progress since the invention of the art of printing, has become steady and uniform. The stream of knowledge, which not many centuries ago, shallow and narrow, toiled painfully to wear away or avoid the obstacles that impeded its course, now fed by a thousand new sources, flows along deep and rapid, sweeping away every obstruction, and defying all human opposition. Mankind being thus arrived at the maturity of collective intellect, we are every day surprised at the results obtained by the vast mass of mind now diligently employed in the acquisition of knowledge. What was formerly the termination of a science is now but its commencement; what was formerly deemed unattainable is now elementary; so that it is impossible to foresee how far improvements may be carried. A short and transitory existence has been allotted to our bodies; individuals die, and generations pass away, but the common intellect of mankind fears not the same fate, nor shares the same brief mortality.

Having laid before you a general view of the geography of life, and the quantity of vitality existing on this earth; having also endeavoured to point out what are the general marks of difference between man and other animals, I shall now allude to the particular subject of this day's lecture, and commence with the consideration of the influence of physical agents on the different classes of beings. Having already given an idea of the extent of life, let us now inquire what it is that limits this extent, that causes life not to be universally diffused and every where the same.

Physical agents which affect life may be divided into two classes; first, those which always exist and are termed constant, from whose influence living bodies cannot be withdrawn, and which also act on dead matter. We find that beings endowed with life are subject to the influence of laws which regulate the condition of dead matter; thus we find solidity, fluidity cohesion, gravity, and the laws called chemical are always in operation. These are the constant physical agents, the principal causes always at work and never ceasing in their action. The second class of physical agents are those which act with not less power than the former, but which vary in their intensity, and from one of which, as, for instance, light, the body may be subtracted altogether; as to the remaining, namely, heat, electricity, and air, no human body can be wholly removed from them without danger. On a general view of the subject, the operation of the first of these influences seems to have limited life to the surface of the earth, the outer crust of which is the sole habitat of life, the remaining solid matter of the earth being, with regard to the support of life, totally useless.

The physical agents which do not vary are the same in all climates. Their influence, which is so permanent, seems also to be so necessary, that were any one of them to be altered, the whole living machinery of the earth would stop from the animalcule to the whale, and from the byssus to the oak. If water were to become solid at 100° instead of 32°, no living being as now constituted could exist. If gravity were diminished on the earth, a thousand inconveniences would be felt by all, and though we do not see any reason why life should cease at once, as in the former instance, still the amount of inconvenience would be enormous and intolerable. Thus if it were suddenly reduced to the force which it exerts on some of the ultra-zodiacal planets, as Ceres and Pallas, "a man could spring with ease sixty feet high, and sustain no greater shock on coming to the earth than he does now from leaping a yard. Giants might exist, and that enormous animal the whale, which now requires the buoyant power of water to counteract its weight, might then be a denizen of the land.—*Herschel.* I might bring forward many other illustrations, but shall not dwell on these matters, as they are sufficiently obvious and generally known.

With regard to living beings, it may be observed, that as a general law resulting from the constitution of the terrestrial surface and of matter, animal life must, as to date, follow vegetable. Some think there are exceptions to this law in the case of carnivorous animals who do not subsist on vegetable productions. But these live upon other animals, which in their turn devour others; the latter, however, are found to live on vegetables. Vegetables always constitute the last link of the chain of nutrition, and are the chief laboratories used by nature for the support and reparation of living matter. Many of the lowest grades of animals seem to possess a power similar to that of vegetables; thus we find that some species of the mollusca appear to possess the power of feeding on rocks composed of carbonate of lime. But this power ceases as we ascend in the scale, and the more per-

fect animals subsist only on matter that has passed through a system of other living beings. This appears to be the law not merely regulating the development as to date of animal and vegetable life at present, but seems to have existed since the creation; for, on examining the strata of which the earth is composed, we have abundant and satisfactory proof that vegetable preceded animal life by many centuries, and that it flourished in full luxuriance long before animals were called into existence. As to extent, it is obvious that vegetable life, constituting the food of animal, must exceed it in extent, and if all the animal matter existing in the world at any particular period were weighed, it would be found inferior in weight to the vegetable matter existing at the same period.

Let us now consider life as existing in the air, the waters, and on the earth, as far as the varying physical influences will permit it. First with respect to light. We know that the permanency and integrity of those physical influences which are constant, and always act with the same degree of intensity, are essentially necessary for the existence of living beings, but it becomes a question whether the varying influences, as, for instance, light, be equally indespensible. Can any living thing, animal or vegetable, subsist in utter darkness? Some, perhaps, would answer, no doubt there may; and would cite the example of the seed buried under ground, so that no light can possibly approach, and yet the process of germination goes on*; or you would refer to the fœtus in utero living and growing in utter darkness. But you should recollect that the seed has received a certain stock of food and latent life from the parent plant, and that the fœtus is ultimately connected with the system of the mother. It might be urged that animals have existed for a very considerable period without light, as toads in wood and certain kinds of rock, in which it has been proved that they must have remained for a long time in darkness. This certainly is the case, and it is true that those animals were alive though long deprived of light, but it was only a suppressed kind of vitality; life was preserved, but not in its natural state of intensity. There are but very few facts to prove that any animal or plant can or does exist in places totally destitute of light. In perfectly dark caves, though moist, ventilated, and affording, by the streams which pass through them, entrance to seeds, we never find any thing but the least organised cryptogamic plants, such as Byssus evanida, Mucor decumanus, and very often not even these or any other species of vegetable. It is true that Humboldt asserts, that lichens have been found even in caverns which have been closed up, and have had no communication with the surface. Thus he saw, in a cave which had just been broken into at Muggendorf, the beautiful stalactites covered with lichen tophicola. The occurrence of Byssus in perfectly dark places, as seen by Pallas in a cave in Siberia, is not so conclusive, for such matters seem to be more the result of new arrangements among the particles of previously organised and living animal and vegetable matter, than new and individual forms of vegetation. Their life appears to be traditional and limited, and the stock appears to depend on that laid up by the previously living plant or animal. Hence it is that we so often observe the Byssus on the fæces of different animals. The extract which I have just quoted from Humboldt appears very singular; I have never in the course of my reading or observation met with anything like it; as to what has been stated by Pallas respecting the Byssus, I am ready to admit that it might happen.

But next comes the question with respect to the animal and vegetable tribes that inhabit the deep. It is a fact acknowledged by those who study physics, particularly the laws which regulate the transmission of light, that the rays even of a vertical sun do not penetrate more than one hundred fathoms below the surface of the sea. If, then, we assume, as there is reason to believe, that the ocean is several miles in depth, some thinking it to extend to ten, others, nearer the truth, limiting it to three or four, observe what a striking image it suggests to the mind; a vast portion of the surface of our globe covered by waters which light never penetrates, where a fluid black as night has for ages brooded over its bed in unbroken darkness! If to this idea, so well calculated to heighten the horrors of the deep, we add, that if light be necessary for the existence of animal and vegetable life, we have the equally awful idea of an immense tract of ocean-depths, whose loneliness is undisturbed by the presence of any living being, and where the eye of the imagination can only picture to itself a black and desolate mass of fluid, not only uninhabited but uninhabitable.

To-morrow, gentlemen, we shall discuss these and several other points connected with the influence of physical agents on vitality.—*Lon. Med. and Surg. Jour. for Dec.* 1835.

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* "It is well known, indeed, that seeds will not germinate in the light; this is caused by light decomposing the carbonic acid gas, expelling the oxygen, and fixing the carbon, whence all the parts become hardened, a condition under which vegetation cannot proceed.—*Lindley's Introduction to Botany.*

Rheumatism is a disease which so often baffles the skill of the Clinical practitioner, that the practice of the Physician to the North London Hospital, in that distressing affection must be acceptable to our readers. We also give the same practitioner's account of the successful employment of the Hydriodate of Iron in Scrofula.

UNIVERSITY OF LONDON.

Clinical Lectures delivered at the North London Hospital, by A. T. Thomson, M. D., Physician to the Hospital, and Professor of Materia Medica in the University. Lecture I. Acute Rheumatism. —Influence of Constitutional Treatment.

Gentlemen,—Since my last lecture, four cases of acute rheumatism have been admitted under my care into this hospital, and I believe my colleague Dr. ELLIOTSON has also taken in some cases of this disease. The number of such cases is not remarkable at this season of the year, for although the disease appears at all times, yet it more especially makes its attack in autumn. It is not easy to account for this fact, unless we suppose that the changes of season operate upon the body nearly in the same manner as changes of climate. Thus we know that when a person passes from a dry and genial, or moderately warm climate to one which is humid and relaxing; and more especially if this humidity be accompanied by a low temperature, congestions of blood taken place in the larger vessels, the body becomes susceptible of the impression of moisture in a remarkable degree, and agues, rheumatism, and similar diseases, are produced.

Among the cases of this disease which I have taken in, one is in a state of convalescence, and will be discharged before we again meet; it is that of *Hannah Susans*, a maid servant, eighteen years of age, who was admitted on the 7th of this month. This woman is of a sanguine temperament and a spare habit of body, and she says that she has generally enjoyed good health. She was attacked four days previous to her admission into the hospital with shiverings, succeeded by heat, with little perspiration, and these returned in successive paroxysms for two days, accompanied by dull aching pains in the joints, which increased so much in violence, that she was forced to leave her place and return home to her friends, who procured medical advice for her. She says that she received much benefit from the treatment pursued; but, as the pains increased in violence, and she could procure no sleep on their account at night, she came into the hospital. She attributes her complaint to sleeping in damp sheets.

Now this, or indeed the application of moisture and cold to the surface of the body in any manner, is one of the most frequent sources of acute rheumatism. But many individuals may be exposed to cold and moisture without suffering from acute rheumatism, thence a question arises—Is a certain condition of the body, a predisposition, necessary before this disease can supervene on the application of these exciting causes? In the case before us, I have not been able to ascertain the existence of any hereditary predisposition, which undoubtedly may be regarded as frequently rendering the system prone to be roused by any excitement into inflammatory action. Our patient is of a spare habit; there is no general hyperæmia, or excess of the circulating fluid; but, in her occupation, that of a servant, she was exposed to irregular, heats and chills; and consequently, retiring to a damp bed, whilst probably in a state of perspiration, it is easy to conceive that the atony which the application of the cold and moisture would produce in the cuticular capillaries, extending by sympathy to the rest of the circulating system, would produce a congestion in the large vessels. It is the effort of the conservative power of the constitution to overcome this state that produces the phenomena of the febrile paroxysm, and by the unequal distribution of the blood probably sets up the inflammatory action in the joints which constitutes this form of disease. Be this as it may, there can be no doubt that, in almost every case of acute rheumatism, as in that which is under consideration, the febrile symptoms precede the attack of pain; and consequently the latter may be regarded as one of the indications of the presence of a peculiar fever, with as much reason as we regard the eruption, of small-pox, or that of scarlatina, as obvious symptoms of peculiar fevers.

At the time of her admission, the patient complained chiefly of severe pains of the knees, joints and elbows, which frequently moved from one limb to another, and were always increased by warmth, and at night. She also complained of slight pain on pressure over the epigastrium; the tongue was furred; the pulse 100, and hard; the bowels were regular, and the urine was natural. The catamenia had been absent for three months. This last circumstance, as the patient was not pregnant, displayed a derangement of health, and no doubt tended to render her more susceptible of the impression of the exciting cause than she otherewise would have been. She was

ordered to take one grain of *colomel*, one of *tartar emetic*, and one and a half of *opium*, every eighth hour; and in the intervals ℥i of the *wine of colchicum*, with gr. xv of *magnesia* in f. ℥ij of water. It may be necessary to mention here my reason for combining the magnesia and the wine of colchicum, an union by no means uncommon. In my practice it arises from a conviction, that much of the benefit of colchicum is due to its action on the orifices of the gall and pancreatic ducts in the duodenum, bringing into the gut the redundant secretion which always takes place in those important glands in a febrile condition of the habit; and by, carrying them out of the system, getting rid of one source of irritation, and enabling the circulation to proceed with more freedom and regularity. Now, when much acid exists in the stomach, the colchicum becomes too active, and passes too rapidly through the duodenum; so that, removing this by the addition of the magnesia, we can with more certainty reckon upon its influence being exerted on the orifices of those important ducts which open into the first gut, and the emptying of which is of so much importance. Our patient found great relief from this treatment, which was continued with little variation until the 10th, when the pains returned with as much violence as ever. The tongue, which had been previously cleansing, became again loaded; but the pulse did not increase to more than 84, and was small and sharp. She was ordered gr. viij of *calomel*, and a brisk cathartic to be taken about an hour afterwards, and to continue her pills and mixture after the bowels had been well purged. Notwithstanding this active treatment, the febrile symptoms and pains increased during the two following days, and, in the afternoon of the second day, she complained of severe pain in the back of the neck, and in the occiput. Finding that the sedative plan of treatment alone was not succeeding, I ordered her to be bled to the extent of twelve ounces, and to take immediately afterwards a pill containing a grain of *calomel*, a grain of *tartar emetic*, and two and a half grains of *opium*, and to repeat this, if the pain should continue, every sixth hour. This method of following blood-letting by a large dose of opium with calomel, often supersedes the further use of the lancet. It operates in two ways, the calomel carried into the system stimulates, the inactive capillaries, converting morbid into healthy action; whilst the secondary influence of the opium tends to allay that irritable state of the nervous system which always is more or less present under the condition of the frame which accompanies rheumatic fever, and which is justly regarded as the pabulum, if I may so express myself, of inflammation. To prevent the recurrence, however, of the pains, I resolved also to take advantage of the contra stimulant influence of tartar emetic in moderate doses, I therefore ordered gr. i to be administered in solution every sixth hour. She has had no return of pain, she sleeps quietly, and complains of nothing except debility. She is now taking three grains of the *bisulphate of quinine* three times a day, and if she gain strength she will be fit to leave the hospital in two or three days.

You will perceive, Gentlemen, in the treatment of this case, and you will observe it in many future cases treated here, that no attention was paid to the local part of the disease, the remedies being directed solely to the relief of the constitutional disorder; and you will reconcile this to the opinion which I have previously advanced, that the local pains are so completely symptomatic or dependent on the febrile disturbance, that the speedy reduction of this by vigorous measures, invariably removes the pains without any local treatment. In the early part of my professional career, it was very much the custom to employ repellent embrocations in rheumatism; but the result of this practice was frequently the migration of the pains from joint to joint; and, occasionally, I have seen the inflammation transferred, by metastasis, from a joint to the heart, the stomach, or the brain, and a case terminate fatally, which, by general management alone, might have been successfully carried on to a favourable issue. I have no hesitation, therefore, in strenuously recommending you, in all cases of acute rheumatism, to leave the relief of the local affection to the influence of the constitutional treatment.

SCROFULA.—*Employment of the Hydriodate of Iron.*

Another case, which is in a state of convalescence, and about to leave the hospital, is one of Scrofula, in a boy named *Knowles*.

This boy displays, in a striking manner, the characteristics of the strumous diathesis: namely, a thin fair skin, with full, watery, blue, eyes, a flabby soft state of the muscles, a general irritable condition of the nervous system, and a deficiency of tone. It is scarcely necessary to say, that this disease exhibits itself under every variety of symptoms, so that no two cases are alike. In the instance before us, the disease is displayed chiefly in cutaneous eruptions; the submaxillary glands were swollen and hard, and on one side tender to the touch. The eruptions were of a pustular description on almost every part of the body, appearing in irregular patches, whilst the greater part of the scalp on the back of the

head was nearly one entire crust of porrigo larvalis. The abdomen was large and tense, and there was evidently obstruction of the mesenteric glands.

The person who brought this boy to the hospital, stated that he had scarcely ever been free from swellings and eruptions, which she attributed to the libertine habits of his father, who had more than once communicated syphilis to his wife. There was no reason, however, for attributing this boy's symptoms to the influence of the syphilitic virus. It might be more justly regarded as depending on bad and defective nourishment, improper clothing, and poor lodging, operating on a habit naturally strumous. The method of successfully managing the case was very clear. It consisted in bringing up the tone of the habit, and exciting a new and more healthy action in the torpid glands. This was to be effected partly by medicine and partly by diet, regimen, and exercise of the body and mind.

Evacuants were not indicated, except merely as prefatory to the after treatment, or preparing the stomach and alimentary canal to be affected by those other remedies, the employment of which was more decidedly indicated. A calomel powder and a purgative were therefore prescribed to empty the bowels ; the head was directed to be shaved, to enable any topical application to be properly used. He was ordered a full diet ; and it only remained to select that tonic which was most likely to fulfil the intentions which must always be kept in view in such cases, namely, to bring up and maintain the tone of the habit, and at the same time afford a fresh impulse to the capillary organs. The *Hydriodate of Iron*, inasmuch as it combines the deobstruent powers of iodine with the powerful tonic qualities of the protoxide of iron, seemed admirably adapted to answer every indication. It was, therefore, ordered, in the form of solution in water, in doses of three grains, three times a day. No topical means were employed, except daily ablutions with soap and water, and a small portion of the diluted citrine ointment *(Unguentum Hydrargyri Nitratis)* applied to the hardened scabs of the scalp. He was ordered full diet, which comprehends a moderate allowance of animal food ; and the nurse of the ward was directed to occupy him in every way in which she could make him serviceable. Under this treatment he has been progressively and daily improving, the eruptions have disappeared, the swelled glands are reduced and softened, he eats and sleeps well, and is in such a condition as will enable him to leave the hospital in the course of a few days. Indeed he is now kept rather with the view of giving him a little additional strength from good, wholesome diet, than from any further necessity for medical treatment.

This is another, of many instances, of the value of the *hydriodate of iron*, in the treatment of scrofula.—*Lancet, Dec.* 1835.

In the following system of Medical polity acted on in the Austrian Empire, it will be found that in every province of the hereditary states, a Medical man is appointed Supreme Director of sanitary arrangements : but here the Military Board, we believe, and Conservancy Department are supreme, among whom there is no Medical adviser. In Austria, however, every Provincial Government has a Medical reporter attached to it, who attends at the meetings of the Magistracy, to vote on all questions touching the health of the local population, &c. &c. and who we would enquire is so fit ? The want of such a system in the great metropolis of India, we fear much, will be found out when it is too late, that is to say, when it has become a second Constantinople.

PRESENT SYSTEM OF MEDICAL EDUCATION, AND THE ARRANGEMENT OF THE MEDICAL PROFESSION, IN THE AUSTRIAN STATES.

(Continued from our last.)

It is to be observed, with reference to Clinical instruction, that, both in Austria and Prussia, students who have completed there theoretical courses are divided into practising pupils and assistants ; the former being entrusted with the treatment of a certain number of patients, whom they visit under the inspection of the Clinical professor. If they acquit themselves well, he does not interfere ; if not, he instructs them in the questions which they ought to put. After each visit, the professor interrogates the pupil as to the class, order, and species of the malady, the prognosis, and the indications. If the pupil be right, he is requested to prescribe aloud. An assistant is attached to each practising pupil, who goes round with him, and in the course of six months becomes a practitioner himself.

The lectures on physiology, pathology, materia medica, and special therapeutics, as well as the clinical remarks at the patient's bed side, are delivered in Latin ; in all the other courses the German is the language employed. In Hungary, Poland, and Italy, the language of each country respectively is used.

Previous to admission to the medical schools, the pupil must produce a certificate of having attended a three years course of humanity in some national school; and pupils are arranged, in general, in three classes; the first consisting of those who have answered best, and obtained the title of eminent, *the others according to their respective merits.* Diligence and moral conduct are high recommendations in the certificate for admission; in fact, the law expressly declares that this must be seriously attended to, in order to exclude, as much as possible, from the study of an art so important and difficult as that of medicine, all those who are not more or less distinguished by their attainments and good conduct.

Matriculation is not attended with any expense.

Students are forbidden to smoke cigars, or to frequent drinking-houses.

No student can advance to a higher class without having attended that immediately preceding it; and he must pass an examination. If his answering be but second-rate, he must go through his last courses again; and if upon another trial he be found deficient, his name is erased from the list of medical students, and he is precluded from entering any other national university.

Every professor is bound to examine his class once a week publicly for at least half an hour. The results he must note down, for the better arrangement of the classes. At the end of every semestre, the pupils are examined in their previous courses; the first examination takes place in the latter part of March, the second towards the end of August; the particular day and hour being announced a month previously. The director and a commissioner of instruction are obliged to attend at these trials: and the professors are enjoined by the law to be as strict as possible, and not to allow themselves to be carried away by an ill judged indulgence. It is during the first year that they are expected to be most severe, in order to get a timely riddance of those students who are dull or negligent. and to secure the state against the danger of having ignorant physicians or surgeons admitted to practice. In the certificates given on these occasions, not only the abilities of the pupil are set forth, but his moral conduct is noted.

The fees paid by each student amount to 30 florins (about 3*l.*) a-year—3 florins a month. These charges go chiefly to the support of a certain number of poor but respectable students, who belong to large families of straitened means, and are distinguished for their diligence and good behaviour.

In order to be admitted to the final examinations, the pupil must shew that he has acquitted himself well at the weekly ones, as well as at those at the end of each semestre. The Dean of the Faculty is obliged to pay special attention to this rule, or otherwise forfeit 20 florins to the general fund. Two students cannot be examined at the same time. The judgments of reception are *Satis Bene* or *Valde Bene.* If two professors vote for the candidate's rejection, he must be examined over again at some future time, going through certain courses prescribed to him in the interval. If he decline this, he is not entitled to have his examination fees refunded to him; but if he submit to a second trial, he has nothing additional to pay. Not so, however, if he be rejected a second time: he must pay his fees afresh for a third examination. Nobody can be examined more than three times: a third rejection disqualifies the candidate from ever practising in Austria.

Previous to the admission of the candidate to examination, he must produce an account of two medical cases treated by himself, and also a report in legal medicine. These papers must be forwarded to the Dean, who communicates them to the examiners, and upon their approval the candidate is admitted to the final *rigorous* examinations.

The rigorous ordeals for the diploma are two in number. The first is an examination in anatomy, botany, natural history, physiology, general and special pathology of external and internal diseases, semeiology, and general therapeutics. The examiners are the Dean, the President of the Faculty, and the professors of anatomy, botany, natural history, physiology, and pathology.

For the second, the subjects are, chemistry, forensic medicine, ophthalmology, materia medica, art of prescribing, and clinical practice; and the examiners are the professors of chemistry, forensic medicine, ophthalmology, and materia medica, together, with a physician unattached to the faculty. In Vienna, the latter person is the vice director, and in the provinces, some practising physician, not a professor.

The candidate may answer, as he pleases, either in Latin or in the vernacular.

Having passed these examinations, he is obliged to write a dissertation on a medical subject. He must also add some theses, which he has to defend publicly against three disputants—doctors of medicine or surgery. The Dean, and the President of the Faculty, as well as four professors, must attend the reading of the dissertation, and copies of it are to be distributed to all who may be present: the said dissertation and theses being written and defended in Ger-

man, if the Dean grant leave ; but this is not very usual, nor without some reasonable pretext.

The expenses of these final *rigorous* examinations are—for the first, thirty-five florins, five florins being paid to each examiner ; for the second, sixty three florins, nine florins to each examiner. The fee to the censorship, exercised by each of the professors in turn, is four florins fifty kreutzers ; for the admission, &c. sixty-nine florins ; to the president of the dissertation, twenty-seven florins : in all, 199 florins (nearly £20.)

If the candidate seek the diploma of Doctor of surgery—1, He must be examined in anatomy, chemistry, materia medica, the art of prescribing, forensic medicine, ophthalmology, and the theory and practice of surgery ; 2, He must perform two operations on the dead body publicly, and in presence of all the professional men and pupils who choose to be present. Previously to operating, he must give a history of the process which he is about to adopt, describe it, point out the different modes in which it may be performed, distinguish the several advantages and disadvantages of each mode, note the indication and contra-indication, shew how the instruments and bandages are to be employed, &c. : in short, he must act with all the care and attention he would use with the living.

If a doctor of surgery wish to obtain the degree of doctor of medicine, he must be examined—1, in botany, physiology, natural history, general and special pathology, therapeutics, and semeiology of internal diseases ; 2, in practical matters relating to internal medicine. For both these examinations, the dissertation, and the admission fees, &c., the expenses are 114 florins, 30 kr. (about 11*l.* 10*s.*)

If a doctor of medicine wish to be admitted to surgery, he must be examined—1, in the theory and practice of surgery ; 2, in the public test required of every candidate for the surgical diploma. The expenses are 110 florins (about 11*l.*)

Non-catholic candidates are admitted to degrees by dispensation only ; but then there is no oath administered at variance, with the religious tenets or observances of the parties.—*Medico-Chirurgical Journal for Jan.* 1835.

We are obliged for want of room to omit that part of this article to which our Editorials refer ; but we shall not fail to insert it in our next.

CORRESPONDENCE.

REPORTING THE DISCUSSIONS OF THE MEDICAL AND PHYSICAL SOCIETY.—The following letter from Dr. Stewart shews that we are not without support at the Head Quarters, where control upon the press is agitated. Letters have been received from the Mofussil speaking the sentiments of our Brethren there, as to their detestation of this close private system, and expressing their approbation of the one we are adopting of speaking out independently and freely. With reference to one part of Dr. Stewart's letter we have much satisfaction in stating that we are now in communication with a gentleman well-known in society at the Presidency, who, by early professional education and long practice, is pre-eminently qualified to report our viva-voce proceedings ; and that he has most handsomely and readily agreed to place his services at our disposal, provided they are acceptable to the Society. At present we do not feel at liberty to mention his name ; we might however congratulate the members of the Society as well as our subscribers generally upon the prospect of having the opinions of the former faithfully recorded by one whose talents, in this particular department, were considered valuable by some of the leading medical journalists at home, and which are *unique* in India.

Should our hopes in this regard be defeated at the next meeting (an occurrence which we can hardly anticipate), we will take immediate steps to submit our appeal to the general body of up-country members, whose interests and wishes we chiefly consult in this matter.

To the Editor of the India Journal and Medical Science.

DEAR SIR,—The question of "Privilege" which was discussed at last meeting of our Medical Society appears to me to affect so materially the character, and interests of the Society, and of the profession, that I will beg leave to trespass very briefly upon your pages and your patience in order to present to the resident members, a few considerations which may perhaps have some weight with them in deciding upon the motion, whereof you gave notice for next meeting, viz. for leave to employ a qualified reporter of the society's public discussions.

Taking it for granted that the gentleman to be proposed is fully entitled to the claim of eminent qualification, I would urge a

compliance with your request upon general as well as special grounds. Of the former, the first is, that grand and undeniable principle, universally admitted, that it is impolitic in any public body whatever, undignified in a learned body, unphilosophical in a scientific body, ungenerous in a professional body, unbecoming in a liberal body of men united for the promotion of public good, to place any obstacles whatever in the way of the free distribution of their opinions by means of a free press: and the second is, the impossibility which here as elsewhere will be found to exist of imposing any restraint upon the legal power which the press possesses, or of limiting the exercise of that power by any other force than that of public opinion.

The objections which were urged against the already published reports were two-fold. One party objecting, not to the propriety of reporting, but to the imperfection of the reports. Another party who had no personal objection to the promulgation of his professional opinions objecting to the reports of debates as an encroachment upon the rights of property which belonged to the society, in and over all that was said or done at its meetings. The objections of the former will surely be entirely obviated by such a motion as that which you propose to lay before next meeting: those of the latter I can only hope will be weighed with other scales than those which are used to try the value of his professional opinions.

Members should remember that the reports are not meant to encroach upon any business of the meeting which is considered private, they are neither meant nor calculated to supersede or interfere *with any* of the Society's publications, either in the form of transactions published annually, or abstracts of papers drawn up, and published by the Secretary shortly after they have been read to the Society. These abstracts are necessarily better than any which a mere Reporter would profess to give; drawn up as they are by one so well qualified for the task, and from the original documents, but if these appear in print early, I can see no possible reason why a Medical journal should be denied the right of copying them from the daily papers and adding to their value and interest to professional readers by giving notes of the opinions expressed and the debate which arose from their perusal at the meeting.

The authors, too, of these papers are naturally anxious to know what reception their papers meet with from their brethren, for whose benefit they have been written, and it does not appear to me that we have any right to refuse to them this information however procurable. I will be able at next meeting to read to the Society many extracts from letters addressed to me from Members of the Society up the country, expressing not only their anxiety to know what was *said* at particular meetings, but their interest in the Reports published in the Journal. But I fear to trespass upon your room by sending you these for publication. Assured as I am however, that the desire felt by *all* the non-resident members of the Society to be informed of what is said as well as what is done at our meetings, I trust that your proposition may be unanimously carried. If it should unfortunately be rejected, I think you should take the sense of all the members of the Society residing in India on the subject.

Believe me faithfully yours,

Howrah, 13th Aug. D. STEWART.

MISCELLANEOUS.

The following copy of official correspondence, and the memorial to the Court of Directors from the medical men of the Presidency Division, submitted to Government by Dr. Mellis on the 20th of June last, cannot fail to interest deeply our Mofussil brethren. Its insertion has however compelled us to keep back, until our next number, an article we have prepared on the constitution of the medical department in the King's Army, contrasted with that in the Honorable Company's.

No. 213.—From the Secretary Medical Board to the Adjutant General of the Army, dated the 25th June, 1835.

Sir,—I am directed by the Medical Board to forward to you, for the purpose of being laid before the Provincial Commander-in-Chief, the accompanying memorial in triplicate from the Medical Officers serving at the Presidency, and its vicinity, with a request that he will have the goodness to submit the same for the favorable consideration of the Supreme Government and eventually of the Hon'ble the Court of Directors.

The different points touched on in the document in question are of great importance, and appear to the Board to be highly deserving of the favorable consideration of the Local and Home Governments, and they trust that the Provincial Commander-in-Chief, will support with his influence the prayer of a body of public servants, so meritorious as they trust, the Medical Department is.—

In forwarding the memorial, the Board desire me to annex a copy of a letter No. 549, dated the 19th instant, from Assistant Adjutant General of Artillery, from which the

Provincial Commander-in-Chief will observe, that the Brigadier Commanding at Dum Dum has declined, for certain reasons assigned, and in the justness of which the Board fully concur, to become the medium of transmitting the documents to higher authority.

I have, &c.

To the Honorable the Court of Directors of the East India Company.

The Memorial of Surgeon James Mellis and other Medical Officers of the Bengal Establishment, most humbly sheweth.

That the recent orders of the Supreme Government, abolishing the situation of superintending Surgeon at Allahabad and Berhampore, have caused them great alarm, they beg therefore most respectfully to bring to the notice of your Honorable Court, that, and other disadvantages under which they labour, the removal of which would be hailed as a valuable boon.

From a number originally small, but proportionate to the limited extent of the British possessions in the East at the time, the Medical Officers of Bengal have attained their present number 350. Of this Establishment until the operation of the order alluded to, fourteen were comprised in the higher grades, viz. 3 members of the Medical Board, and 11 superintending Surgeons with the rank of Field Officers. All the rest amounting to 336 (now have rank, pay, and pension of Captains and Lieutenants respectively.

Utterly disclaiming the slightest trace of invidious feeling while doing so, your memorialists would respectfully submit that the Military Officers of the Bengal Army enjoy superior advantages, as compared with themselves. Thus out of 1980 Military Officers 297, or 1, in 6⅔ are Field Officers, and are in receipt of superior regimental pay and allowances to Surgeons.

Of 350 medical officers, 12, or 1, in 29 rank with field officers, and draw allowances superior to Regimental Surgeons.

Of 495 Captains, 159, or 1 in 3, hold staff appointments with extra regimental allowances.

Of 120 Surgeons, 10, or 1 in 12 hold staff appointments with extra regimental allowances—Besides these, six hold staff situations at the Presidency on allowances less than those of regimental Surgeons.

The military fund have divided the Surgeons on this Establishment into 3 eighteens, namely 18 Colonels, 18 Lieutenant-Colonels and 18 Majors, in which grades they provided for their widows, although the two last grades, and 6 in the first only receive pay, and are ranked as Captains. Not, however, further to expatiate upon the inequality of status; suffice it that the medical man neither enters the service nor retires from it under equal advantages with the military officer.

Your memorialists entreat your Honorable Court's generous consideration for the condition of the juniors of their body, whose pay is barely sufficient to provide a gentleman-like subsistence for the passing day. When in charge of Regiments too, Assistant Surgeons draw only Rs. 165, a month as Staff allowance although during the absence of full Surgeons, they are *bonâ fide* acting Surgeons, and perform all the duties of full Surgeons, from each of whom, until his return to resume charge, 300 Rupees are deducted monthly. Your memorialists very respectfully submit, that the whole of this sum should be drawn by the Assistant Surgeon in charge during the Surgeons absence (as was the usage previous to the abolition of the medicine allowance) on the same equitable principle that an Officer in temporary command of a Regiment, whatever be his rank, draws undiminished the command Staff allowances.

The Surgeons of the Bengal Establishment labour under the anomaly of having no step, rank or pay, analogous to those of Major, which bears hard upon them in garrison, in cantonments, in the field, and the division of Prize money, &c. &c. This being the case, a Surgeon of the standing of the several Lieutenant-Colonels, certainly of most of the Majors, has no alternative, should his health fail after a servitude of perhaps 30 years, but of retiring on £191 a year, or the pension of Captain.

While on Furlough, an old Surgeon having but the rank and pay of Captain, is denied the promotion of Superintending Surgeon unless he returns to India, neither can he enjoy the superior pension until he has served two years in that rank. On the other hand a Captain, Major, or Lieutenant Colonel on furlough, may retire in England on his superior rank and pension, should he obtain his promotion within a year from the commencement of his furlough. It is most desirable that Senior Surgeons on furlough should enjoy the like privilege.

An order, not acted upon for many years, has lately been revived to the prejudice of your memorialists, which enjoins that Surgeons who have been for some years employed out of the direct line of military medical duty shall (with few exceptions) before being deemed qualified for the step Superintending Surgeon, do duty for two years with a Regiment. No similar order exists in reference to Military Officers employed on Staff for political appointments. Fully confiding that the established num-

ber of Superintending Surgeons would be kept up, and in confident anticipation of promotion to the higher grade in 2 years, Mr. Surgeon King of Patna, and Surgeon Stiven of Cuttack some time ago, resigned their Civil appointments, but their promotion notwithstanding this sacrifice is by the recent orders put off to an indefinite period. This simple fact, your memorialists humbly represent, is sufficient to demonstrate how hard this regulation bears upon the service.

Simultaneously with the half batta order in 1828, the compensation for the medicine allowance was directed to be paid under the designation of Majors batta, Surgeons at half batta stations, however, lost half their compensation, instead of half their batta i. e. that of Captain. Though your Honorable Court were pleased to rectify this mistake eventually, yet, as it existed for three years, several Surgeons suffered heavy loss during that time, who never had their arrears paid up. In like manner on the restoration of Mr. Muston to the higher grades after he had for years given up promotion, many of your memorialists were under the painful necessity of petitioning against that measure; and although their prayer was granted, and Mr. Skipton was promoted to the Board, yet his commission was not dated from the time of Mr. McDowell's retirement, as in justice it ought to have been: by which omission Mr. Skipton lost 8 months' rank and pay of that superior grade, which also retarded less or more the prospects of your memorialists in general, by keeping, or tending to keep Mr. Skipton 8 months longer in the Board.

Encouraged by the countenance extended by your Honorable Court to that object, your memorialists had instituted a retiring fund. The late abolitions, however, in the second senior grade, and the consequent insecurity as to numerical strength for the future, have entirely thrown out their calculations, and rendered the possibility of setting the fund going, exceedingly problematical.

A principle of superior controul and general surveillance your memorialists respectfully would urge, is as indispensable in the Medical as every other department of the state, on such a principle Superintending Surgeons were originally appointed in order to be efficient Inspectors and Directors of divisions including their various posts, stations and hospitals. With them, in communication with superior authority, it will be admitted that full powers ought to rest for adopting the most effective measures to secure the constant, active, and complete organisation of a properly qualified Medical Staff confidentially entrusted with the specific wishes of Government in relation to their respective circles of superintendence, they would be enabled efficiently to proportion the means to the end of their line of service, and would be justly held responsible for the medical details of their divisions. In 1815, while directing the publication of the New Code of medical regulations, the late Marquis of Hastings emphatically expressed the sense which Government entertained of the responsible and important duties of Superintending Surgeons, which would, he declared, be best appreciated by contemplating the extensive benefits that result to the public service, and to the important interests of humanity, by a constant and minute exercise of the Superintending Surgeons controul and authority. So onerous indeed did his Lordship deem these duties, that, as your memorialists have been informed, he suggested to the Supreme Council the expediency of appointing eight Deputy Superintending Surgeons, for the inspection of Jails, Hospitals, &c. while their principals were occupied in the more important duties of examining and verifying the reports, checking and regulating the expenditures of Medical Stores and instruments, keeping up a due supply of Medical Stock, Medical Officers and Medical Subordinates every where within their circle, providing for sudden exigencies, and superintending the medical management of European Regiments, of Stations, of Hospitals at the Head Quarters of Divisions, the carriage, removal, or other disposal of the sick, &c. &c. &c. Reluctant as your memorialists are to take up the time of your Honorable Court with details, they purposely abstain from a more particular statement of the various duties of a Superintending Surgeon,—suffice it that they are manifold, highly important, and responsible, requiring constant vigilance and circumspection in the individual, much fatigue and exposure are also incurred, as will be readily understood by your Honorable Court on bearing in recollection, that some of the circles of superintendence comprise a space as extensive as the whole British empire, without its comforts and facilities of transit, and including a risk of frequent liability to the constitutional operation of causes the most noxious and often fatal to human life.

Your memorialists, lest they might be misunderstood, forbear from entering into any comparative statement of the difference in the rates of promotion between their own and the other Presidencies; contenting themselves with respectfully submitting that the contrast is striking, and as regards themselves, very disadvantageous. Independent of other, and obvious results, great

loss accrues to the public service from the advanced period of life, and broken health of Officers in the two higher grades of the medical list, since, in consequence of the exceeding slowness of promotion, they become, generally speaking, aged, and infirm men ere they attain those steps.

In conclusion your Memorialists would respectfully remind your Honorable Court that numerous advantages, formerly enjoyed by the Medical Department, have one by one been withdrawn, which fact taken in conjunction with the late orders of Government, abolishing two Superintending Surgeoncies, has impressed them with feelings of great anxiety and apprehension.

On your Honorable Court's full and indulgent consideration of all these circumstances (which it has been their sincere endeavour to submit in the most deferential manner consistent with a clear statement of them) your memorialists ground a fervent hope of further representations of this kind being for ever after rendered unnecessary, by your Honorable Court's acceding to the following heads of Petition which with the utmost submission and respect, to the judgment of your Honorable Court they venture to suggest.

Your Memorialists accordingly petition for a classification of Assistant Surgeons, with proportional increase of pay rising with length of service.

They pray, that a similar classification should take place, of Surgeons, and that a certain number, as may appear expedient to your Hon'ble Court, be appointed Deputy Superintending Surgeons, with rank and personal pay of Major, and such staff allowance as may be deemed fit.

They pray, that the sum of Rs. 300 a month, deducted from the pay of Surgeons absent from their corps, should be given in addition to his personal allowances to Assistant Surgeons acting for them.

They pray, that old Surgeons on furlough should be placed upon a par with their military brethren, who may retire in England on the superior rank and pension of field Officers, should their promotion take place within twelve months from the commencement of their furlough.

They pray, that Medical Officers on attaining the higher grades, be permitted to retire at once on the rank and pension of those steps, like their military brethren, without being obliged to serve for any further period.

They pray, that the order making it imperative upon Surgeons out of the direct military line to qualify for the step of Superintending Surgeon, by serving two years with a Corps immediately previous to promotion, even though he may have served for many years with the army, and seen much active service, be rescinded.

They pray, that the injury suffered by your memorialists, by the non-promotion for eight months of Mr. Skipton as member of the Medical Board when a vacancy admitted of a contrary course, be obviated by your Hon'ble Court graciously issuing an order for retrospective promotion and pay, to the parties chiefly affected by that anomaly: and your memorialists finally petition, that the two abolished Superintending Surgeoncies be speedily restored to the service.

Most earnestly, and with sentiments of the profoundest respect, entreating that the petitions of their humble representation be, in the exercise of your Hon'ble Court's well known and widely appreciated sense of justice and liberality, complied with, which would indeed be acknowledged by a meritorious, and grateful class of your servants as a genuine act of grace towards them, your memorialists as in duty bound will ever pray.

(Signed) J. MELLIS, M. D.

Surgeon Artillery, &c. &c.

We the undersigned Medical Officers of the Bengal Army do hereby testify our concurrence in the prayer of the memorial addressed by Mr. Surgeon James Mellis to the Hon'ble the Court of Directors on our joint behalf.

F. Corbyn, A. J. Jackson, A. Garden. Thos. Spens, M. J. Bramley, Chas. C. Egerton, J. R. Martin, J. Hutchinson, S. Nicolson, H. Chapman, W. Twining, E. W. W. Raleigh, H. S. Mercer, A. Halliday. G. Craigie, J. Grant, J. T. Pearson, H. G. Goodeve, James Ranken, W. Cameron, J. S. Sutherland, R. C. W. Connochee, Duncan Stewart, N. Wallich, C. Davidson, Thos. Leckie, T. E. Dempster and M. Bryce.

PORTRAIT OF SIR CHARLES METCALFE.—Those of our readers who are admirers of the arts, and desire to see the likeness of the Liberator of the Indian Press, we would recommend to call at Mr. Swaine's, No. 1, Circular Road. This painting affords proof of the judgment the East Indian community have displayed in selecting Mr. Swaine as the artist to take the portrait of their distinguished friend and patron. The figure of Sir Charles is as large as life, and the great merit in the performance consists in the justness and strength of expression: so true and natural is it, that one actually imagines

himself in the presence of the eminent individual it represents. The able performance cannot fail to raise Mr. Swaine's character as an artist who has evidently studied nature diligently to be so correct in his designs and to hit expression with such extraordinary truth, exactness, and delicacy.

A NEW PROFESSOR TO THE MEDICAL COLLEGE.—We are glad to find that another Professorship has been added to the Medical College, and that Dr. O'Shaughnessy has been appointed. We are promised a sketch of the plan of instruction to be adopted in the college by its worthy Principal: we shall suspend some observations we had to make on the new appointment, until the sketch alluded to is received.

A UNIVERSITY A DESIDERATUM IN INDIA.—We seem to have been misunderstood when we advocated, at the late Town Hall meeting, the founding of a University for India. We would therefore particularly desire to state that, in consequence of the great extent of this community, comprised as it is of Indians, Europeans, of the Civil, Military, Clerical, Legal, Medical, Commercial, &c. we maintained that a University, that is to say, a chartered corporation for the education of youth in the liberal arts and sciences, was a desideratum. Into such an institution youth might be admitted to study for degrees in the faculties of Theology, Law, and Physic. In this, there was nothing of the A. B. C. proposition, as supposed by Mr. Longueville Clarke, unless Mr. Clarke is of opinion that a University in India should not extend beyond an Infant School, or that our students at the various seminaries in this metropolis, are not to presume to aspire to the privilege of obtaining degrees for proficiency in literature and science.

We really cannot conceive how Mr. Clarke could construe our proposition into having anything to do with A. B. C. Infant Schools, or children yielding up their butter for Bibles: unless we refer Mr. Clarke's treating points, so irrelevant to subjects under discussion, to an unfortunate habit he has contracted, and to which Mr. Pattle very appropriately alluded.

Scotland has no less than four Universities, why then should not all Asia have one? Mr. Clarke mistakes, if he supposes that the founding of a University for India involves great expence. A University may comprehend within it, as in most instances they do, several Colleges; and the one for India, as suggested by a friend, might consist of the colleges already existing, viz. the Bishop's College, the Hindoo College, Madrussa, the Serampore College, La Martineire, and the Medical College: while the Colleges at Benares, Agra, Delhi, the Elphinstone College at Bombay, the great schools at Madras, the Parental Academy, and High School, which may be justly considered as the Indian Westminster, Eton, Charter House, &c. &c.

The advantage which the community of India would derive from such an Institution as the one we have proposed is, that all classes of the community would have the privilege of obtaining certificates of proficiency entitling them to collegiate degrees, for which a gentleman must now send his son 15,000 miles and at the expence, the very least, of £200 a-year, while he goes through the prescribed term at Oxford or Cambridge.

Such is the anomalous state of things at this moment that there is a Medical College, in which it is professed to instruct the students in all the branches of Medical Science, and yet there is no legalized institution in this country, to which the students who are declared competent in professional knowledge can apply for degrees, to be enabled to practice Physic or Surgery according to the Laws of the British Empire, of which India now forms a part. Now why should not the building which is to commemorate the law that liberates the Press in India, and which is for the reception of the Metcalfe Library, become the SENATE HOUSE OF THE UNIVERSITY OF INDIA? The emancipation of the press benefits the whole country; and the memorial of this great and enlightened act of legislature should be celebrated and contributed to by the whole country. But the building for a Library will, it is obvious, benefit only those who sojourn at the Metropolis, and who alone, under present circumstances, will subscribe to it.

We submit these observations for the consideration of the gentlemen of the Committee which is to carry the Resolutions passed at the Town Hall into effect, assured that they will do their utmost to promote the wishes of every friend to liberty and knowledge.

THE LATE W. TWINING ESQUIRE.—It is our painful duty to announce the death of W. Twining, Esquire, first Assistant Surgeon to the General Hospital which took place on the 25th ultemo. Mr. Twining was engaged in the benevolent act of raising a person thrown out of his buggy, when he felt the sensation of the bursting of some vessel internally. On reaching home the sensation increased to that of suffocation; the symptoms however began to assume the appearance of Angina Pectoris till vomiting of blood followed, which left no further doubt in the minds of his medical attendants that a blood vessel had been ruptured, which proved the cause of his death.

In Mr. Twining, medical science has lost an indefatigable labourer.—To a naturally strong mind in him was added the fruits of a splendid education, which were developed in his numerous writings. The situation he held in the General Hospital, afforded opportunities of gratifying a mind prone to the acquisition of speculative as well as practical knowledge, and we find in Mr. Twining the Elliotson of London, always coming forward with the result of some new experiments.

We have often listened with admiration to the many proofs he furnished before the Medical and Physical Society of his ardent zeal and enthusiasm in adding to the store of medical knowledge. He was well fitted to succeed our late beloved John Adam, he carried on the duties of the Secretary, by devoting every leisure moment to promote the interests of the Society, and he was never absent from any of its meetings. To us particularly there is something painful even in the thought that we had often to oppose our professional opinion against his. We have some instances of this kind in our present number which we would have gladly omitted, but the press has some days since printed off the sheets, and we cannot break our pledge with the public by delaying the publication of the number. But though sometimes at variance in professional opinion, we were always friends and we could always heartily and honestly shake hands after discussion:—but our worthy talented colleague and professional brother has passed away, and in that hall of scientific tournament, we shall alas! meet him no more.

As a practitioner Mr. Twining had gained a remarkable degree of eminence in Calcutta, and he was generally consulted by his brethren in cases of difficulty and danger. He was the author of numerous excellent papers in the Medical and Physical Transactions, of an Essay on the Cholera, and of a work on the clinical practice of Bengal. Mr. Twining was 45 years of age, of a strong athletic form. In him an intelligent and benevolent countenance was the faithful index of a mild and pleasing disposition. His remains were followed to the grave by a vast body of the inhabitants, and by most of the leading members of the society of this City.

TO CORRESPONDENTS.

The following communications will appear in our next.

Sketch of Mr. Syme by EDINENSIS.

On the Topography of Assam by DR. MACCOSH.

HUNTER on Pectoral disease. This paper was selected for our present number; but want of room compelled us to defer it till our next.

We have been from the same cause compelled to delay J—— on Vaccination, and W. L. on Herpetic Affections.

We beg E—— will furnish us with his real name.

There can be little doubt as to the intention of "AN ENQUIRER'S *Communication;*" and we shall take no notice of it unless we are furnished with the name of the writer.

We have received Mr. STOTT'S valuable paper on Scrotal Hernia.

We beg to acknowledge the communication from our worthy colleague and esteemed friend, MR. SPILSBURY. There is valuable matter in this communication which shall appear in an early number.

We have just received a truly valuable paper on the Temperature of the climate of Mussoorie, drawn up by DR. ROYLE.

THE INDIA.

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ORIGINAL COMMUNICATIONS.

It is with feelings of exultation and pleasure we present our readers with the sketch of Mr. Syme from our able correspondent Edinensis. We should be ungrateful not to express our high sense of the kind and liberal manner in which he comes forward to cheer us on the way of our arduous undertaking by giving to us the support of his talented pen. There is scarcely any species of writing more pleasing than sketches of living characters, particularly of our brethren celebrated in the ranks of science either in Europe or India. Why should not the characters of some of our talented men in the Mofussil, Madras, or Bombay be given for the information of the British public? We are well aware that some of our correspondents possess the materials, but are diffident as to the mode of arranging them for publication; we need not say how thankful we would be if such were sent to us, as well as likenesses of the individuals so sketched as to be lithographed, which would add greatly to the interest they must necessarily excite.

SKETCH OF MR. SYME.

Sir,—Your predecessors in the editorial chair having called upon their friends to back you in the honorable and arduous duties devolved upon you by their regretted retirement, I hope the well known names, whose support is a "Tower of Strength," will gladly respond to the call, and liberally support, by their writings and influence, the most important "movement" yet made by our profession in India. Although only a "nominis umbra," I beg to tender my allegiance to the new Regime, whose motto will still be, I hope, "en avant," and invoke my fellow shades, "black spirits and white"—*i. e.* both black and white Doctors, to flock to your newly raised standard.

In pursuing my former subject, "The Private Surgical Lecturers of Edinburgh," I think only one man of mark remains to be noticed, viz. Mr. Syme, whose Hospital Reports and Surgical writings are well known and valued by the profession. Mr. Syme is by no means a striking subject for a sketcher, there being no salient points, and broad light and shade in his character; yet the very smoothness of mind, and simplicity of manner, which characterize him, are refreshing, when contrasted with that straining for piquancy and effect, which is so common and easy a piece of acting. If I could for a moment command Dr. Syntax's* brain, (pen and ink) it would save description, for which fortunately there is little room however; Mr. Syme being only remarkably *unremarkable* in his appearance. His stature is low, and his face a "tabula raza;" placidity being its reigning condition—a full, black, downcast eye, is the only good feature of his countenance, which is seldom excited into animation. His manner, in lecturing, is no exception to the general awkwardness of our public speakers; he is painfully bashful in addition, and only dares to look at his audience by stealth, immediately dropping his eyes again, like a lady detected in giving "looks." One feels inclined to bid him "hold up his head, and look like a man," but the effort would kill him. All this however is counterbalanced, by the respect which his known integrity, love of his profession, and kindness to his students inspire; and his class accordingly, is the

* Every alumnus of Edinburgh, for the last 25 years, must have his optic foramen, instantly filled with the "image" of *Dr. Syntax*, as he used to be seen walking the hospital wards, of a wet day in broad napless hat, faded green tartan cloak, under which might be detected a uniform coat of the Edinburgh Volunteers; while his nether limbs rejoiced in long boots with worsted tassels.

The sole occupation of the Doctor, from year to year, is to take deadly pen and ink likenesses of the public Lecturers, and of the "Judges all in row."

most crowded of all the Surgical Theatres. He is not content with merely teaching, and showing how a thing ought to be done, but he makes his students *do it*; the pupils in rotation, performing all the operations of Surgery, under his eye, in public—a most judicious, and necessary part of instruction; no one knowing how to do a thing *properly*, till he has actually done it with his own hands. Mr. Syme's unaffected, kind manner towards his students, and the total absence of academic etiquet, naturally make him a great favourite; and his brother lecturers in the kingdoms would do well to imitate him in all these respects. The Edinburgh Infirmary has long been an heirloom, like every thing else connected with the University, and it is only now struggling free from the nightmare of nepotism. Mr. Syme having no University blood in his veins, found some difficulty in gaining admittance to the "Reserve," which led him to found the Edinburgh Surgical Hospital chiefly at his own expense, but which, by his skill and management, is now flourishing, and is a formidable rival to the Royal Infirmary. Mr. Syme's private character is as much admired as his professional talents, and he is a proof, that devotion to duty and to the calls of humanity, without an anxious regard for money, will bring all good things" in its train.

Your obdt. servt.

EDINENSIS.

We feel ourselves much indebted to Dr. McCosh for his very interesting and valuable paper on the Topography of a country which is at the present moment exciting a lively interest among all classes of the British community in India. The proximity of Assam to the confines of China renders a knowledge of the nature of the soil of these newly acquired possessions and of their climate, not only in a medical, but in a political point of view, of the greatest importance.

ASSAM.

By Assistant Surgeon McCosh.

Face of the Country.—Assam is that extensive tract of country, on either side of the *Burhampooter*, extending on its northern shore from the river Monash opposite to Gowalparah, and on the southern, from Nogurbera hill about 16 miles above Gowalparah, to the foot of the Himalayah mountains, close upon the western boundary of China. Though, geographically speaking, Assam terminates at the river Monash, yet the same peculiar part of tract country borders the Burhampooter, as far as Jumalpore, has the same climate, and the same change of seasons. The appearance of Assam is very different from that of most other parts of India, being a perfect flat as far as the eye can reach, interspersed with a multitude of little green conical hills, like haycocks on a meadow, rising abruptly from the level plain to the height of from one to five or seven hundred feet. So very singular are the shape and arrangement of these mountains in miniature, that the imagination could fancy them to be the monument of a country now no more, that once stood on the same level with their summit; whose obdurate nuclei having resisted the floods of centuries that washed away the more moveable materials into the Indian Ocean, were designed by Providence as places of shelter and retreat, from the waters that periodically inundate the land. Yet strange it is, the Inhabitants do not avail themselves of this provision of Nature, to raise themselves above the reach of the floods, when they could do so without trouble, expence, or inconvenience. They will sit still on the *kala mutti*, till the water encompasses their huts, and quenches the fires on their hearths, rather than be at the trouble of living comfortably upon dry solid healthy soil; and when the river has risen too high for them to wade from one house to another, or even to allow them to stand upon their own floors, they paddle out of their huts in canoes, and roost upon *muchauns* high as the thatch itself, with the frequent calamity of their children's falling out of their nests and being drowned. So much for the influence of superstition! These little hills are believed to be the abodes of devils and unclean spirits, and unless they are consecrated by a religious temple, and defended by the worshipper of Bramah, it is judged adviseable to leave fiends incarnate in undisturbed possession.

Soil and Cultivation.—Though the country is at all seasons of the year swampy and intersected with half filled nullahs and stagnant jheels, and though during the rains it is flooded with water, yet in the dry season it is very susceptible of cultivation, and would no doubt amply repay any labour and expence bestowed upon it, in producing abundant crops. The soil is for the most part alluvial, though it sometimes consists of red clay, so stiff and tenacious, as to resist the current of the river like rock itself, even when undermined, and thrown down in fragments into the stream. The soil upon the hills is universally composed of red rich loam, with a sprinkling of particles of quartz, and sometimes talc,

though talc is but rare; and if we may judge from the exhuberance of the vegetation upon them, they also would well remunerate the cultivators. Large masses of granite are scattered over these hills and seem indebted for their often whimsical position to some convulsion of Nature. Whether it is owing to the effects of a long series of mismanagement under the Native government in causing emigration, or to the harassing wars which devastated the country, there is but little cultivation; immense tracts are covered with reedy jungle, sacred to the buffaloe, the elephant, and the rhinoceros, where human habitation is unknown, and the atmosphere is loaded with miasmata and death. The principal articles of cultivation are rice, mustard-seed, opium, and cotton. The opium is prepared by absorbing the fresh juice of the poppy by a stripe of cotton cloth, till it is saturated. When dry it is tied up in rolls for the market and called *kauni*. In using it about two inches square of this cloth is infused in boiling water and drank at a draught. The cotton is chiefly grown upon the hills, or little patches cleared of the jungle. Silk worms are occasionally reared; and a very stout cloth called moonya, or mooya, is manufactured from their thread. Stick lac is collected in very considerable quantities.

Burhampooter.—The Burhampooter may be called the great drain of Assam, and not only of it but of the mountainous countries that bound it on the north and the south. It is a river of the very first magnitude, and perhaps pays more tribute water to the ocean, than the great Ganges itself. From the uncultivated nature of the country a voyage up is always a tedious one, and as dreary a trip as one could well desire. For days and days together nought else is visible but sandbanks, and water bounding the very horizon, with no trace of vegetation but an endless jungle of gigantic reeds; without the footstep of an inhabitant or signs of animal life, but waterfowl and alligators. These rude pieces of Nature's workmanship are very numerous; they are almost all of the duck bill species, I have not seen more than three of the short nosed or bull-headed ones. The dandies have the greatest dread of the latter; but not the least of the long nosed ones. So little apparent affinity to animal life do they in their basking hours evince, that one could easily imagine them taking root and vegetating upon the mud and slime on which they repose, or fancy them a concrete lump of clay moulded into shape by the passing stream, encrusted by the drifting sand, and wrought into bass relief, by the tear and wear of the seasons.

Though this is the general nature of the Burrampooter, it is occasionally relieved by groups of beautifully wooded hills, whose shape and colour constantly changing by position gratify the eye with a pleasing panorama, till other and nearer groups come into view. As the voyager advances higher up the scenery improves; and a series of hills innumerable, retiring far away in fine perspective, till their blue conical are relieved by the snowy peaks of the Himalayah mountains, towering their icy pinnacles mid-way up to the vertex of the sky, afford one of the grandest scenes to be met with.

To a wanderer from the land of "the mountain and the flood" the sight of a hill in this level land is at first a most interesting object. Few things more readily summon up before the mind's eye the associations of the day of his boyhood, and he hails its appearance like a friend of his youth met in a foreign land, after long years of danger and vicissitude. For this reason the scenery of Assam is alway agreeable, his eye wanders from hill to hill as over faces once familiar, and with happy invention assimilates them, with the "*banks and braes and bonny hills*" of his dearly beloved home.

Navigation.—In the Navigation of Assam there is less variety of boats than might be expected, where the inhabitants are so dependent upon them that a boat is as common to every hut as a brass lota, or a Khitchree pot. Yet the canoe may be called the only boat peculiar to the country. However many of these are of an enormous size, and capable of carrying two hundred maunds, though cut out of the solid trunk of one single tree. Such a thing as a sail is as seldom used as a tracking rope or *goon*: in going down the river they are propelled by oars or more commonly paddles, and in stemming the current they push along the shore with long poles. When bulky cargoes, such as cotton, are brought down the country, a common practice is to fasten two canoes together by transverse beams, so that the canoes remain three or four feet apart: the whole platform is loaded with cotton or straw and in this way they admit of carrying a much heavier load than they could when disunited, and with much greater safety.

I have often been struck with the sagacity or rather instinct with which the *dandies* picked out their course amidst the multitude of channels branching in every direction, and all of them so broad and deep that it seemed difficult to say which was the main stream. Navigation is now brought to such perfection that a commander gets as little credit for the correct management

of his ship, as the driver of a stage coach, or the conductor of a steam train along a railway. But the navigator of such a river as the Burrampooter has infinitely more difficulties to contend with; where the river is so extensive that it has more the appearance of a series of immense lakes, the communications of which are often so undefined and uncertain that one knows not which way to steer, and at best only vaguely pointed out by the lazy current or a casual sail; where he has neither chart nor compass to guide him; where so few opportunities occur of getting information from other dandies, or the inhabitants; where the country is so flat that no landmarks are conspicuous from any distance; where old banks are constantly disappearing and new ones rising into view; where one month he might pass by a thriving village, and in passing the spot a month or two after no trace of its existence would be discernible; and yet with all these obstacles and exceptions, the *dandies* very rarely take a wrong direction.

Population.—Though the population of Assam chiefly consists of Hindoos, yet it contains a considerable portion of Moosulmans also. Neither the one sect nor the other are very rigidly observant of their high caste principles; they have less distinction and pride of caste, and a greater latitude and toleration in their intercourse with one another. They eat opium to such excess as to be for the most part under its influence, and drink arrak to intoxication.

The Assamese have generally, I might almost say universally, been described in history as a degenerate and weakly race; but so far is this from being correct that they are tall muscular, and powerful. The men are a shade or two lighter coloured than the Bengalies; with high cheek bones, and a physiognomy a good deal similar to the Chinese. The women are fairer than any race in India; and possess a greater share of personal beauty: not Hindoostanee beauty properly so called, but a configuration of form and feature, and a blending of the rose and the lily closely approaching to European.

The mountainous parts of the country are inhabited by Ganows, Rabbas, and Cacharies, who seem to have no caste at all. They are robust in person in the extreme and of immense strength of body; they go men, women, and children, almost literally naked, and lead a life as nearly approaching that of the savage as possible. A Ganow's greatest treasure is as many human sculls as his house can hold, his greatest cordial a pint of English brandy, and his greatest dainty a pudding made by feeding a young dog with as much rice as he can hold, and then roasting him alive till the rice is cooked. The Ganow women are amongst the ugliest pieces of female nature, sturdy and masculine, yet as fond of ornament as the fairest of the daughters of Eve. But quantity seems to have more charms for them than quality, and they are delighted with loading themselves with rings, and chains, and bells of solid brass, enough to break the neck of any lady in the country. From ten to fifteen or more brass rings, as thick as a goose quill, and three or four inches in diameter, hang in the lobe of each ear: by whose weight they are stretched so as to touch the clavicle. The lobes often being distended to a filiment eventually give away, and this is reckoned the consummation of all ornaments put together. It entitles the possessor to the envy of her own son and the admiration of the others, and she moves with her torn ear, in the circle of her squares with acknowledged superiority. One might suppose that the load in the ears might plead an apology for the neck's being free; but it also is cased in a mass of chains, proof against the hatchet of the executioner.

At Gowalparah there is a small society of Native Christians of Portuguese descent. They have acquired all the habits of the natives and in outward appearance are not to be distinguished from them. The natives stand in great awe of them and dread their resentment.

In an essay such as this is, it would be improper to pass over a small Colony of Burmese soldiers stationed at Singymary in the district of Gowalparah. During the Assam war these soldiers surrendered to the British Troops and were allowed the condition of returning to their Native country. But preferring the clemency of their conquerors to the reception they might probably meet with from the Burmese Government, they were granted an asylum in the Hon'ble Company's dominions, had lands to cultivate assigned them, and an advance of capital to enable them to commence their farming. This Colony originally amounted to about 500 men, but they are now reduced to less than one half. Many of them have died: many others have deserted their old commander, and fled into the neighbouring hills; and the remainder having taken to themselves wives of the country, are increasing in substance and multiplying. In any disturbances amongst the hill tribes, these Soldiers are available as a police force, and, when armed by the Civil powers, are found useful, effective and trust worthy.

Slavery.—Slavery still continues to a very considerable extent: and these poor

wretches are bought and sold every day for fifteen or twenty rupees. Every Native on the receipt of more than ten or twelve rupees a month has one, two, or three of them, and all the drudgery of the household, and the labour of the field are performed by them. Many of these have been enthralled by mortgaging their bodies for a few rupees, and, for the want of the means of raising the original sum accumulated by exhorbitant usury, continue in bondage for life, themselves and their descendants, from generation to generation.

Houses.—The houses throughout Assam are all elevated upon platforms of earth, about three or four feet high. The walls are made of large posts sunk deep into the ground, lined with mats or reeds; and plastered with clay and cowdung. The rich and the poor make use of the same sort of materials, with this difference that the baboo's is of larger size with a finer texture of mats and has a higher terrace.

Conveyance.—Where water affords so ready a conveyance, carriages and beasts of burden are in less demand: and so little are their services turned to any account in Assam, that it is possible to travel from one extremity to the other and not see a wheel carriage or a laden bullock. Man himself is the only beast of burden and while his plough oxen are grazing in the skirts of the neighbouring jungle, recruiting their emaciated carcases, he carries to the nearest market upon bangies, and at great labour to himself, the small quantity of surplus grain—the fruits of their combined toil.

Antiquities.—The Antiquities like most other countries in India, are either of a religious or a warlike order; and are deserving of particular notice. Near Gowhatty, on the summit of a hill, stand the famous temples of Comikya; one of the most celebrated places of pilgrimage in India. Thither pilgrims concentrate from all parts of Hindostan, with confident hopes of their devotional requests being granted, when they might have sued at other altars in vain. The buildings themselves are very handsome structures, on a pretty extensive scale, and would stand a comparison with most second rate temples in the country. But the Temples of the present day, composed of brick and mortar, seem only of modern date, and have undoubtedly been erected upon the ruins of a much more ancient set, built of hewn and carved granite. These fine masses of masonry are not honoured with a situation in the modern structures; but are degraded by being transformed into paving stones, steps of stairs, gutters, and other subservient purposes. Even in that low state evidences of their former grandeur still remain, and a carved moulding, a bass relief, a fragment of a flower, or a frustum of a column, proves their former pre-eminence. So very extensive have these antique buildings of Comikya been that the road up the hill about a mile long and thirty feet broad, is paved from top to bottom with these granite ruins; a work itself of enormous labour and expence. On the rocks along the side of the road several Hindoo images as large as life are sculptured; but their execution is rude and imperfect, betraying a degree of workmanship infinitely inferior to what may be seen on many of these despised paving stones.

Almost every hill around Gowhatty is crowned with one or two pretty little temples, peeping in conical beauty through the trees; but most of them have some granite ruins scattered round them, and afford the same proofs of having supplanted other buildings superior to themselves.

So well are these temples still endowed, that they are all of them in complete repair, and inhabited by all the ministers and mercenaries of Hindoo religion.

Gowhatty is believed to have long been a favoured abode of the Hindoo deities: and yet it appears they liked to keep the Burrampooter between themselves and their worshippers, and had their secret retreat on the opposite side of the river. Tradition says that in coming down gods and goddesses to the river to bathe one morning, their amorous passions unluckily exposed them to mortal gaze; to hide their shame and secure themselves against ever again exposing themselves in such a foolish predicament they instantly threw up a small rocky island. But the natives seem to have understood the use of the miraculous island as well as themselves, and to this day call it *Arparbat.* Around Gowahatty there are many remains of extensive fortification; the mounds and ditches of many of them can still be traced for miles, without interruption; the gateways of some are still standing, and the guns of others are still lying on the ramparts. Tanks of the most capacious dimensions are very numerous, and many of them are only observable from the boggy nature of the psendo-soil which undulates upon the water concealed beneath it; or from the exhuberance of reeds and jungles with which they are choked. Rungpore far up the Burrampooter is also celebrated for its fine temples, and they are by many thought superior in architecture to any in Assam.

On the hill of Gowalparah stand or rather are buried the foundations of some very extensive buildings; but what purposes they have served seems undefined. No mortar

has been used in cementing them, but merely the red clay of the hill. It is remarkable that the bricks are quite different in size and shape from any generally used in India, and in all respects resemble those used in England. There are many bricks of a huge size amongst them, about one foot square and eight inches in thickness.

Natural Productions.—Assam with all it wastes and jungles, however much neglected and abused by man, has not been altogether forgotten by Nature, in her distribution of the good things of this life. The tea plant, the coffee, and the plantain grow wild upon the mountains uncultivated and till of late uncared for. Every individual connected with the welfare of our adopted land, and with the independence and prosperity of the land that gave us birth, must rejoice in the interest which Government has lately taken in the cultivation of the tea plant, and in their following up the praiseworthy exertions of Captain Jenkins, Commissioner for Assam, and Lieutenant Charleton who ascertained its positive existence in the British dominions and brought it seriously to public notice. Yes! the genuine tea plant grows as favourably upon the hills of Upper Assam, as in the adjoining provinces of China, and it only requires the same attention to be bestowed upon its culture and manufacture, to secure the same blessing to ourselves and our country, which has for such a series of years so materially added to the revenues of the Chinese Empire.

It is a consummation devoutly to be wished for that the Government of India will spare neither trouble nor expence in trying what can be done by a well arranged tea plantation, on a pretty extensive scale. The distance of the tea district from Calcutta, though great, will be easily surmounted when such a noble river as the Burrampooter is always open for boats of the largest burden, even to the base of the mountains where the tea grows, nor ought this consideration to be forgotten that in the event of complete success, of which there can be so little doubt, they may eventually turn one of the richest streams of Commerce into their own gardens, and cope with or even excel the Chinese themselves in one of the most valuable articles of European luxury.

The coffee plant could perhaps be turned to no less advantage than the tea, and would require still less care and attention. On the hills around Gowalparah it grows as abundantly as the heath on the British mountains, and continues in blossom a great portion of the year, giving the hills the appearance of being covered with snow. Though but a small plant in its natural state and seldom higher than eighteen inches, yet when cultivated it grows to the height of five and six feet and so stout as to form a walking stick. In its wild state it is not very fruitful, bringing but few berries to perfection; but by proper gardening it might be made as productive as the domestic coffee.

The ratan grows wild throughout Assam, and so luxuriantly as to form the most impenetrable of all jungles. Though not equal to that of the Eastern Archipelago in point of strength and beauty of polish, it is still a most valuable acquisition to the natives, and when split into withes is converted into every use from that of a rope to a thread, and seems to answer all the purpose as well, and sometimes better. The main stems, some of which are two hundred feet long, though little thicker than the finger, are in mountainous passes wrought into suspension bridges, and the rind of the spine of the leaves is extensively used for making mats.

India rubber or caoutchouc is procurable from a tree in the forests, but it is of inferior quality. The strawberry with a single yellow flower is indigenous, but dwarfed in size and destitute of flavour. The tribe of Ferns so rare in most parts of India are very numerous, and many of them very beautiful. Fig trees form a large share of the vegetation, but the fruit of none of them is eatable. There is a countless variety of creepers upon the hills whose beauty and perfume would render them valuable acquisitions to the bower or the parterre. The variety of Parasite plants is numerous and interesting. The betel nut palm is cultivated to a large extent about most villages; but the cocoa, the date, and palmira are rare. At Gowalparah there is a most singular instance of a betel nut tree giving out shoots and saplings. The main trunk is about ten feet high and in good health, though not yet arrived at maturity. A bud or shoot, about the size and appearance of a good sized onion when beginning to sprout, is situated on each of the three lowest rings of the trunk, and from amongst the roots around the stem, spring nine or ten thriving saplings from one to six feet high. This vegetable phenomenon attracts a great deal of the attention of the natives, and is believed by them to be the certain prediction of some piece of great good fortune befalling the possessors.

Fruit trees of all kinds, with very few exceptions indeed, do not at all thrive in Assam, and are seldom or never brought to perfection; either the roots are eaten up by the white ants, or the bark becomes cankered and diseased, or the leaves are gorged by insects; and before the abortive fruit is half ripe, it is filled with worms and uneatable. Even those fruits which might be considered indigenous, as the fig and the man-

goe, share the same fate, with the peach, the pear, the plum, and the apricot.

(To be continued.)

REVIEW.

A PRACTICAL ESSAY ON THE HISTORY AND TREATMENT OF BERI BERI. BY ASSISTANT SURGEON JOHN GRANT MALCOLMSON, MADRAS MEDICAL ESTABLISHMENT. MADRAS: PRINTED BY ORDER OF THE GOVERNMENT, OCTAVO, P. 343, 1835.

It is our wish to follow Mr. Malcolmson as nearly as possible in the practical part of his work. His official situation gave him opportunities of obtaining documents, access to which is denied to others. An instance of this we lately experienced in the refusal of an application we had made to Government through the Medical Board for being allowed access to certain documents on the Topography of India, from which we expected considerable help in illustrating our work with that mass of practical information which is to be found in documents and papers deposited on the shelves of public offices, and there left to moulder as a legacy for the exclusive benefit of rats and white ants. Secretaries to Medical Boards appear to have exclusive privilege to extract information from their hiding places among the voluminous records of public offices over which they preside. It is therefore but just that they should endeavour by means of these accidental facilities to enrich so far as it may be in their power the already vast store of intelligence on Medical Science. Such have been the peculiar advantages which Mr. Malcolmson has enjoyed, and we are happy to say he has the merit of making the best use of them. Mr. Malcolmson is evidently an indefatigable labourer in the field of medical knowledge, and we rejoice that the subject of his present essay has been the means of eliciting the notice of the Government to his exertions and of obtaining for him a fair reward, namely, his present honorable appointment. It is seldom that public journalists have to record the triumph of merit and talent over the influence of partial favor and patronage. We may therefore be pardoned for giving vent to feelings of exultation in our notice of a fact so creditable to the equity in the ministration of gifts by the Government of Madras.

The following is an abstract or rather outline of the symptoms of Beri Beri by Mr. Malcolmson, as deduced from his own experience and the reports to the Medical Board on the subject of that disease.

"It usually commences gradually, with a feeling of numbness, sense of weight, and slight weakness and stiffness below the middle of the thighs, sometimes preceded by muscular pains. There is slight œdema of the feet and legs, especially along the tibiæ, often found to come on after the other symptoms. The walk is unsteady and tottering even when the patient is not aware of weakness in the limbs, which are occasionally tremulous; spasms occur in the calves and soles of the feet, sometimes becoming general and occasionally shooting to the chest and larynx, obstructing respiration and speech. The want of power often rapidly increases to almost total palsy, especially of the extensor muscles, and in a few cases, the patient after slight indisposition suddenly loses the use of his legs. Rigidity and various painful affections of the nerves accompany the paralytic symptoms; and there is sometimes pain along the spine, commonly at the two last lumber vertebræ. In some cases the disease goes no further and a cure is effected: but more frequently, the numbness extends upwards towards the abdomen, there is general sense of lassitude and aversion to motion, and the hands, arms, and chest, (and in a few cases even the neck and lips) are gradually benumbed. There is oppression and weight at præcordia, dyspnœa on slight exertion, diffused and irregular pulsation in the cardiac region, and the face and hands are puffy and œdematous. The patient is often found dead in bed, or sinks after several fainting fits or throbbings at the heart; or the œdema rapidly increases and extends up the trunk, violent dyspnœa and inability to lie down in bed comes on, with anxiety, cold sweats, cold extremities, rapid feeble pulse, urgent thirst and partial suppression of urine.* At the commencement the urine is always scanty, of a deep red colour without cloud or sediment and possessing very peculiar properties; in some old cases it becomes copious, turbid, and pale, with a large white

* Lividity of the lips is only observed when the dyspnœa is extreme. Restlessness is an important but not very common idiopathic symptom. As in many diseases of the nerves there is a tendency to intermission of the painful symptoms. *Original note.*

deposit, and is passed with pain, from an irritable bladder. The stomach is irritable in many bad cases, and pain and tenderness in the epigastrium is sometimes complained of; there is in a few, pain in the abdomen, or a sense of heat is diffused over it and the chest. Effusion takes place into the chest and more rarely into the abdomen, and there are now and then some signs of inflammation of the pleura or bronchi. In the early stage, the pulse may be full, hard and frequent or little altered; when the face is puffy and there is weight and oppression at the præcordia it is quick, often irregular, and usually small, although it is occasionally strong.

"Various dyspeptic symptoms occur, the bowels are often costive, the stools green and variously disordered, and the eyes are often tinged yellow. The skin is rather cold, unless there is pyrexia which is often present in the evening. The disease is sometimes fatal in a few hours, but is often chronic, and in these, the patient is liable to sudden death, to rapid aggravation of the symptoms, or supervention of new and more formidable ones, by which he is soon carried off; and if he survives these, he may live for a long time bed-ridden, dropsical, and a true paralytic.†

The following is an account of two cases in the 1st Battalion 17th Native Infantry, by Assistant Surgeon A. Campbell.

"Two men died of beriberi. One of them was admitted with ulcers on his feet, and was taken ill of beriberi, after being some time in hospital, which is the reason that his death is placed under the head of ulcers. His complaint commenced with thirst, lassitude, dyspnœa, slight swelling all over his body, particularly of his legs which pitted on pressure; his tongue was white, pulse 100, pretty strong, but intermitting; his lower extremities were affected with palsy or loss of voluntary motion; and he complained of a heaviness all over him. Those symptoms became severe, particularly the difficulty of breathing; and he died the day after he was seized. His death appeared to proceed immediately, from the action of the lungs and heart being impeded in consequence of effusion."

† Although beriberi may with practical advantage be divided into a sthenic and asthenic form, I trust that it will appear in the sequel, that there are strong reasons for avoiding making a division of the symptoms in this stage of the enquiry and with our present knowledge. The following extracts will illustrate this imperfect description.

Extract from the 1st half yearly report of 1823 of the 1st Battalion 17th Regiment Native Infantry stationed at Masulipatam, by Assistant Surgeon A. Campbell.

We find another account of symptoms detailed by Mr. Assistant Surgeon Rose.

"The stout and healthy seem to be equally susceptible of it (beriberi) as those who have suffered from disease or dissipated habits, and the rapidity of its progress is somewhat singular. A numbness about the ancles is the first symptom, which is generally thought nothing of till the 2d or 3d day, when the patient finds he is unable to walk or even stand without assistance; this is followed by an œdematous swelling and leucophlegmatic countenance, the pulse is feeble, the skin cold, the urine scanty, and the person sometimes as soon as the 7th or 8th day is suddenly seized with oppresssion at the præcordia and dyspnœa and carried off. I have never in any instance seen it attended with pain and seldom with swelling in any part of the trunk.

The following case, related by Dr. George Pearse, is particularly striking.

"The only remaining casualty which I have to notice is the death of a sepoy belonging to the Grenadier company, a remarkably stout man, who was admitted into hospital on the morning of the 21st October, complaining of urgent dyspnœa, total inability to move his body or limbs, which as well as his face were much swollen, with a sensation of fulness and tightness of the skin, pulse 90, full, and firm: no sickness at stomach or complaint of pain in any part of the body. Said he went to bed quite well last evening after having eaten a hearty supper of rice as usual, and this morning early, was suddenly seized with the present symptoms. 16 oz. of blood were immediately taken from his arm, and a dose of pulv. jalap. comp. ℥i administered, which produced several fluid evacuations during the day; towards evening the dyspnœa was much diminished, and two pills consisting of calomel, gr. ij. pulv. scillæ gr. iij, were ordered (to be repeated twice a day).—During the following night difficulty of breathing again returned and continued till morning, when he expired rather suddenly, about 24 hours after the commencement of the attack."

Mr. Malcolmson furnishes some useful tables to shew the influence of the seasons; but we admit that the disease depends much on length of residence. The following tables illustrate both causes.

Table shewing the comparative prevalence of beri beri in different months of the year amongst the

Native Troops serving in the Northern Division.

Months.	Remaining	Admitted.	Died.
1827.			
January	7	12	6
February....	8	10	3
March	7	3	1
April	6	5	1
May		5 or 6	1
June		Several	1
July		8	6
August		30	8
September ..		40 to 50	16
October	23	47	10
November ..	53	17	7 or 8
December ..	37	23	3 or 4

REMARKS.—During September three deaths occurred, of intermittent fever, of which however the admissions do not exceed those in July when none died. And in December there were three deaths from fever, and one from mercury taken to excess for the cure of beri beri.

Table of monthly admissions, deaths, &c. of Beri-beri in 1828.

Months.	Remained.	Entered.	Died of beri-beri.	Died of other diseases.	Remarks.
Jany.	36	8	4	5	
Feby.	15	5	1	3	
Mar.	14	8	0	2	
April	18	6	1	6	
May	13	5	2	1	
June	6	3	0	6*	* Probably one or two of beri-beri.
July	5	11	4	3	
Aug.	10	18	4	6	
Sept.	19	16	3	5	
Oct.	23	39	7	4	
Nov.	43	22	7	7	
Dec.	27	33	8	9	

Among the causes of the disease, we find the following on the influence of moisture.

"There certainly appears to be some connection between the moisture of the surrounding country and the prevalence of beriberi; but much more complete and accurate series of observation are necessary, to show to what extent this acts, in how far it is necessarily present, and by combination with what other influences it produces effects so different from those of similar or greater degrees of the same cause."

The following is important as regards the influence of situation.

"We may therefore adopt the common opinion, that the disease does not prevail 40 miles inland. Two exceptions however present themselves. It has already been observed that the 37th regiment N. I. (and it might have been added the 47th regiment N. I. also), continued to have cases occasionally at Nagpore for some time after leaving the circars. I have seen cases at Hydrabad of the same kind, and I have also been informed, that sepoys returning on leave from the circars to Bellary and the Southern Mahratta country are occasionally found to have the disease; probably in many instances formed before they left the Northern division.* The second exception is presented in Kandy in Ceylon, which is 60 miles from the nearest shore, but its insular situation and intensity of the cause in that island, account for the circumstance, and will not alter in any great degree the general law which we are now prepared to state; viz. that beriberi prevails in certain districts, within 40 miles of the sea and at no great distance from mountainous forest tracts, and in which the rains commence early, are of considerable violence, and the face of the country much flooded, affecting chiefly adults and strangers from other districts and other parts of the same, who have resided from 8 to 20 months in the place.† This law will, I have no doubt, require to be greatly modified as our information is extended, but it will be useful at present in directing our enquiries ‡."

* I have seen one or two men long in the interior, ill of a disease difficult to be distinguished from beriberi. *Original note.*

† I have seen it attack two persons in one family there months after their arrival from the interior, and a serjeant of one of His Majesty's regiments had a disease very like beriberi from exposure to night air at Hydrabad. It is said that no persons under 18 years suffer from the disease; I have seen it in boys of 14. *Original note.* Dr. Herklots saw a case in a child 4 or 5 years old. My opinion was asked regarding a disease in a boy 3 years old who was considered to have beriberi. There was some loss of power of the lower limbs with dropsy, but the child was stated to have had a slight eruption over the body and a tumid belly, and to have been relieved by purgatives. I did not see the patient, but I do not think the disease was beriberi.

‡ Since this was written, many cases of beriberi or of diseases resembling it have occurred in the interior, and numerous histories of such cases have been furnished me by the kindness of various friends. I have not yet completed an analysis of these histories, but after deducing those alluded to in note 8, and others which are obviously improperly styled beriberi, some will remain which I could not on careful personal examination distinguish from genuine examples of that disease. The truth of the general law as stated in the text is, however, not affected by these exceptions, which are rare, and many of them will, I have reason to believe, be hereafter found to be examples of some of the allied classes of ill understood affections which prevail at certain times in this country. It is stated by several to whom these cases occurred, that they never before met with any thing of the kind.

As regards diet Mr. Malcolmson observes as follows.

"Much has also been said of the effects of various kinds of food, and Dr. Herklots enumerates a number of articles whose use he considers injurious; but when we reflect that these are standard aliments all over India, we cannot carry our deference to his experience so far, as to admit, that they can produce, in these districts only, so singular a train of symptoms.

What effect the extensive use of fish may have, in combination with other influences, I am not prepared to say; but the comparative cheapness of all kinds of grain in the circars, and the easy circumstances of many of the native soldiers who suffered, are fatal to any supposition of the disease depending on deficient and unhealthy diet."*

Diseases, having many symptoms like those of beriberi, have been caused by the use of grain which had become diseased by the attack of parasites, either of the animal or vegetable kingdom, and attention should be directed to this, as the ears of corn are in this country much infested by them."

Touching the influence of the disease as it affects Europeans, the following is quoted from Dr. Pearse's report.

"'Europeans and the natives of inland countries of India, are less liable to this disease than natives of the coast; although numbers of men from the upper provinces of Bengal were residing in the same situations, and in every respect subject to the same influences as coast men, in a native corps in which beriberi was prevailing extensively at the time, they all escaped.' At page 96 of Hunter on diseases of Lascars, the same fact is stated by Mr. Colhoun (afterwards Stirling), late first member of the Madras Medical Board, who was at that time (1800) assistant surgeon to a battalion of Madras sepoys serving in Ceylon. As this work is so scarce, I could not, until these sheets were in the press, obtain a copy in Madras or Calcutta."

Touching caste the following is quoted from the reports of Messrs. Geddes and Macdonald.

"These peculiarities have been remarked rather more distinctly among the Mussulmauns than in other castes of natives, and taking into consideration the relative proportion of individuals of this religion, to the Hindoos; there seems some ground for supposing, that the Mussulmauns suffer more generally from this disease than those of the Hindoo religion."

To ascertain whether water had any influence in the production of the disease it was subjected to minute and strict chemical analysis. The following speaks as to the result of these enquiries.

"From these facts, it is evident that no relation exists between the quality of the waters and the prevalence of the disease."

On the subject of the treatment Mr. Malcolmson begins by adverting to the effects of bleeding.

"Mr. Marshall found bleeding useful in a case where the chest was severely affected; and when it is so, and the pulse is strong and full, no doubt can exist as to the advantage of a free use of it."

"The following case is selected, to show its beneficial effects, in similar circumstances, in removing the pectoral symptoms in natives, and also the great tendency to relapse, a fact which forced itself very unwillingly on my attention when less familiar with the disease."

"In these cases the pericardium was the part principally affected, the pulse was full, strong, and frequent, the action of the heart violent, and the disease recent; but when the symptoms return, the same treatment may be repeated with equal advantage while the strength is yet little reduced. The effect of the bleeding was assisted and the urine increased by digitalis, squills, and touching the mouth with calomel, but the constitution being under the influence of mercury did not prevent a return of the symptoms."

"When there is no dyspnœa, if there is evidence of much excitement about the heart, a free bleeding will be very beneficial."

"Nor is it in recent cases only, that venesection may advantageously be employed; in case second, palsy had lasted for

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If the disease is beriberi, the neighbourhood of the sea cannot be considered necessary to its production, although it must still be viewed as greatly favouring the generation of its cause. Most of the supposed cases have occurred in seasons of great drought, which is singular, as it is so much under the influence of moisture. In two instances some of the troops suffered much from low forms of fever, but in others this was not the case.

* It is mentioned in Christison's work on poisons, that a disease, of which puffiness of the face and feet, and palpitation, were amongst the symptoms, arose in some parts of France, from salt being accidentally adulterated with iodine or hydriodate of potass. I have examined some specimens of salt from the coast, and could not discover any of either of these substances; but since I met with the remark, I have not been able to procure any, which I could ascertain, to have been brought from a district where beriberi was prevailing. *Original note.*

many months, and anasarca and affection of the chest had several times occurred previously, yet a moderate bleeding was necessary to relieve dyspnœa, oppression, and violent action of the heart with a quick, full, and strong pulse."

"When bleeding is required for the relief of irregular and violent action of the heart, it should be limited to such a quantity as may be sufficient to relieve the oppressed organ, without debilitating the patient and thus rendering him more liable to irregular actions, and putting it out of our power to repeat the evacuations when the symptoms return. The operation should probably be performed in the erect posture and in a full stream, but we must not produce fainting, which is always dangerous in diseases of the heart."

"Local bleeding from the chest has been used in a few instances with benefit, and might be more freely employed with safety and a prospect of advantage."

"On the employment of general bleeding, when there are symptoms of abdominal affection, I am not able to communicate more than one or two observations. The stomach suffers less in the circars, than in Ceylon, and seldom until the disease has made great progress, and other dangerous complications have supervened. As it has been found to be inflamed, in some cases in which it had been irritable before death, it is probable that bleeding will be useful; and I have found it so in a few cases, although the benefit has not been so decided as in the cardiac affection. The pulse is usually small, and the powers feeble, but this is not universal, and I have not had sufficient experience to justify my coming to a conclusion, whether the difference depends on the seat or nature of the affection of the stomach, or on those of the chest or other parts."

"When the bladder is very tender to pressure, or there is more than the usual degree of pain in hypogastrium; and when the irritation of the urine causes either some degree of strangury or retention, in the sequela I have fully described, bleeding by leeches is generally followed by relief, although it cannot be expected to be permanent. Some benefit has also been derived from cupping and leeches over the kidney, when there was much pain or tenderness in the lumbar regions.

The rheumatic pains in the limbs are often attended with pyrexia, and when the pulse was firm, a small bleeding seemed useful."

"There are three classes of cases in which bleeding has been uniformly fatal, but some further experience will be necessary to define them with accuracy. The first is that in which œdema of the lungs (and probably also where effusion into the chest) has taken place suddenly, characterized by symptoms previously described."

"2d. In that form of spasmodic dyspnœa shooting from the limbs, or otherwise connected with the muscular affections, and attended with lowness of pulse, cold extremities, and prostration of strength, the peculiar nature of which is likely to be but imperfectly understood, until that of long known analogous affections are better explained, bleeding has been a fatal measure."

"3rd. These are of different kinds, but at present we can only class them as being a spasmodic, enfeebled, or obstructed action of the centre of the circulation arising from various causes, and indicated by tendency to syncope, sense of faintness, dyspnœa coming on in paroxysms, coldness of the extremities, cold sweats, anxiety, and restlessness, a pulse hardly to be felt, a throbbing of the heart, * not always feeble,

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* Much accurate observation and nice discrimination is required, to distinguish these symptoms from those referred to at page 249, and of which Mr. Wright's cases (note 121) afford interesting examples. It is evident from his observations, that bleeding is sometimes required when with these symptoms, there is throbbing and increased action of the heart and great vessels, and that the pulse which may have been small and even weak, occasionally becomes stronger and fuller; but I am satisfied, that if the pulse is feeble, the utmost caution is requisite in practising it, and this opinion is confirmed by the following case recorded by Mr. Wright.

"Goorapah, sepoy, A company, ætat. 25. 1832, August 1st, vespere. Admitted with paralysis of the upper and lower extremities, dyspnœa, weak and intermittent pulse at the wrist, full pulsations at the large arteries, general œdema, hot and dry skin, scanty urine and constipated bowels. States that during the last week, he has had numbness of the extremities, and was attacked last night suddenly with the above symptoms. Mittat. sanguis ℥xv. R Calomel. gr. x. pulv. antimon. gr. iij statim et repet. post horas tres. Habeat mist. camphor. ℥i, spt. æther. nitric. ʒj, tinct. opii gtt. x. 2d. After the abstraction of the blood the patient expressed himself much relieved, there being less dyspnœa, moist skin, and pulse more regular, he felt inclined to sleep, and I imagined that he would probably continue free from any urgent symptoms; they however returned suddenly with increased violence at 2 A. M., and although I arrived at the hospital shortly afterwards, he was in a dying state: could I have anticipated this and been in time to repeat the venesection, I think that from the relief afforded by the first, this might also have been attended with benefit, and perhaps been the means of restoring the patient."

"Morbid appearances. On examination the lungs were found much collapsed, of a dark colour, being tinged with venous blood,

irregular pulsations, &c. These have been traced to water in the pericardium and to softening of the heart."

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and appeared to float in water of which there was a considerable quantity. The venous system of the brain and medulla were engorged, and there was about half an ounce of water in the ventricles; no traces of inflammation were observable in the stomach and intestines; the heart appeared flaccid and enlarged."

"Temporary relief may sometimes be obtained from the abstraction of a small quantity of blood even when effusion has taken place into the chest, but in such circumstances it must always be a doubtful remedy, and its repetition perhaps inadmissible.

"The following case treated by Mr. Macdonell shows that the remedy is of uncertain efficacy, even when indicated by the symptoms.

"Goorapah, sepoy, 22d regiment N. I. Admitted into the Rajahmundry hospital, 8th January, 1828; quite a young man. He says that ten days ago he was quite well, he then first observed some swelling of his feet which gradually increased, four days ago first felt some numbness of his feet, there is now considerable œdema of his feet and hands, and his face is puffed. Had fever for the last three days. The numbness is not much complained of, and is felt from the middle of the thigh downwards, he has the power of his toes and no pain in his limbs. His gait is staggering, Pulse 110, and skin a little above natural. Urine high coloured and he says it is of the natural quantity, tongue clean. His bowels confined for the last three days; took a purgative yesterday which gave him four large stools. The chest sounds clear on percussion, but the action of the heart is full. Breathing more hurried than natural. Had fever yesterday evening. Was on foreign service and had dysentery from which he recovered. Extrahat. sanguis brachio ʒxx. Frictions with unguent. hydrarg. camphor. to the spine. R Scillæ pulv. gr. vj, pil. hydrarg. gr. xx. M. Divid. in pilul. æqual. vj. One morning and evening. At 2 o'clock his breathing became distressed and at 5 P. M. he died."

"The opinion of so experienced an observer who had used it freely in the earlier part of his practice, that bleeding is likely to do more harm than good if not used with the most accurate discrimination, deserves to be carefully attended to. The following observations are valuable. "The first indication is fulfilled by reducing the pyrexial excitment and venous congestion, and restoring the energy and general tone of the system. Where the disease has come on suddenly, where the patient is of a strong constitution, there has been no general bad health preceding, or where it is accompanied with considerable pyrexia, or along with the external dropsy there is much dyspnœa in the horizontal posture, one or more very cautious blood-lettings may be performed, the effect of the operation on the patient being at the same time watched, and care being taken that it is not prosecuted,

"Both general and local bleeding have been employed where there was much pain in the spine, and in a case in which this and swelling of the abbomen were, at first, the most prominent symptoms, v. s. was used with advantage, although cupping over the painful part was more efficacious."

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so as to debilitate, or after any appearance of aggravation of the disease such as increase of frequency in the pulse or of œdema from its use, has shown itself." * * *

"Thus the compound powder of ipecacuan has with advantage been given in the paroxysm of febrile excitement, producing a remission of the pyrexial symptoms, attended with profuse perspiration. A similar effect appears to have been produced by the use of fumigation, and most likely the pediluvium and fomentations may have acted in some measure in this manner."

"The digitalis however has been that medicine, which has been chiefly used to restrain that strong action of the heart which has been mentioned, and thus to control in some degree the irregularities of the circulation in beriberi." * * * "Mr. Macdonell, surgeon of the 41st regiment, again, referring to the use of mercury, remarks with respect to digitalis as follows: During the progress of the fever it will be found that the patient is generally unable to get off his cot, in fact is in a state of paralysis, he has some little power in moving his limbs, but they are quite unable to support the weight of his body. Sometimes he is not able to turn himself in bed, and at the same time the heart is found beating strongly in the chest. To combat this state of irritability, I have recourse to such doses of digitalis as may be necessary to control the heart's action. The exact quantity of course varies, but I have given as far as forty five minims every fourth hour consecutively, before a decided effect was produced upon the pulse."

"When symptoms have taken place which show, that the irregularities of the circulation have gone on to decided congestion in particular organs, and that serous effusion is either impending or has already, in a greater or less degree occurred, experience appears to confirm what the opinions advanced in these pages would suggest, that a stimulant plan to restore as quickly as possible the energy of the system, and the application of means for exciting the action of the extreme vessels of the surface, are more likely to afford relief and to impede the progress of the symptoms, than a different mode of treatment. Where the violent dyspnœa of the more advanced stage has taken place therefore, or a patient is brought into hospital gasping for breath with but slight external anasarcous effusion, little time is left for the gradual restoration of the balance of circulation, and the immediate object is to remove the extreme pressure on the organs of respiration and circulation. The use of the warm bath, fomentations and fumigations, assisted by stimulants of a quickly dif-

So much for the effects of bleeding. We now come to Mr. Malcolmson's opinion on the use of mercury.

"It may be stated as a general fact, that mercury exerts no directly salutary influence over the nervous symptoms, nor prevents the accession or return of the visceral affections. Beriberi has made its first attack on men under the influence of mercury."

This has also occurred in cholera: but we have nevertheless decided evidence that calomel was the most successful remedy ever used in that disease. Mr. Malcolmson acknowledges that Mr. Hamilton used simple doses with success as well as Dr. Wright, notwithstanding Mr. Malcolmson is opposed to the use of the remedy; and the only reason he gives is that he has "seen several patients destroyed by violent ptyalism produced by mercury prescribed by the lower class of native doctors."

When mercury is not given to salivate but "as a purgative combined with jalap, calomel has been very useful in a great many cases, and as might have been expected, this is best marked when the biliary seretions are disordered, the eyes tinged yellow, and the abdomen tumid."

On the subject of purgatives he says:

"*Purgatives* are often of essential service in beriberi, and the compound powder of jalap has been, almost universally, acknowledged to be the best. One or two doses frequently remove the œdema of the lower extremities, sometimes increasing the urine at the same time, but without benefit to the other symptoms."

"Four patients were cured by elaterium, in a station where beriberi seldom occurs; and examples are now and then met with, (most frequently when the paralytic symptoms are very slight), in which free purging by croton and other medicines, enable the constitution to throw off the disease."*

"As a general rule, I would only use mild and warm laxatives in advanced cases; rhubarb answers very well, and is also an important adjunct to a remedy hereafter to be described. Gamboge, so much used by Mr. Ridley, does not appear to possess any advantage over more certain and less drastic purges, and has appeared to excite inflammatory action in the stomach and intestines. Oil of turpentine may probably be used with advantage, as it exerts antispasmodic powers, but the cases in which it has been used as a purgative, do not warrant any opinion. As an internal stimulant it has perhaps done some good, in small doses combined with æther; but it has appeared to have done harm in some other cases.'

With respect to diuretics Mr. Malcolmson observes:

"The use of diuretics is of essential importance to the removal of the œdema, and especially to prevent the extension of the anasarca upwards, and the effusion of fluid into the internal parts, particularly the cells of the lungs."

"Mercury has been very much employed in combination with squills, and its diuretic virtues in this combination are very decided, without its being used so as to affect the mouth; which should not be done, unless with the greatest caution and in a few severe and obstinate cases: the small quantity of calomel which will affect the gums in this disease, therefore, renders it of importance to give it in small quantity, that it may be continued as long as the squills &c. may be required."

"Digitalis has been much used in the form of tincture, the only one in which its virtues are well preserved in India; and has been very useful as a diuretic, given pretty freely and with the usual restrictions, at the same time that calomel and squills are taken."

"It has appeared to be more effectual in removing the œdema of the face than other means, which is probably to be referred to the moderation of the heart's action and lowering of the pulse, which frequently follows its exhibition.

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fusible nature, antispasmodics and blisters, should be had recourse to, such as are recommended by Mr. Christie; and when the urgency of the affection is somewhat relieved, these should be gradually diminished, while the more permanent and less vigorous means, are in like manner substituted, in order to keep up an equally diffused state of the circulation, by restoring the energy of the whole system. In those cases where the congestive state is more evident in the brain and spinal marrow, the same principles ought to guide the treatment, but here it is probable that narcotic remedies should be entirely avoided." *Messrs Geddes and Macdonell.*

* Croton has been much employed by some gentlemen. The tincture, in whatever form administered, often excites distressing vomiting, and the oil given in pill is not altogether safe, if there is any intestinal inflammation. It has caused severe pain while operating, and left increased tenderness to pressure. *Original note.*

"But of all diuretics, none is so generally successful and universally useful as cream of tartar, which has been very generally adopted by experienced practitioners (from evidence of its powers) in beriberi and in ignorance of the remarks of others.* Thus, Mr. Ridley in Ceylon and myself and others in the circars, can bear testimony to the virtues ascribed to it. Its laxative effect, grateful taste, and consequent soothing qualities are powerful recommendations, in addition to the direct benefit from its diuretic powers."

"The acetate of potassa has been used in a few cases, and was probably useful."

With regard to the use of stimulants.

"*Stimulants, &c.* In all paroxysms of dyspnœa coming on suddenly, especially when they are of a spasmodic character, and attended with feeble pulse and cold extremities, large doses of laudanum as recommended by Mr. Ridley, in combination with æther, spirits, aromatic spirits of ammonia, &c. as circumstances may indicate, are to be diligently employed. The extremities and body are to be rubbed with stimulating liniments, which of themselves have been found sufficient to restore the heat; and of these, turpentine, ammonia, and especially cajuput oil, have been the most effectual."

"Many cases of beriberi from the commencement, and all chronic ones in their progress, are attended with low action and debility, and it has therefore been very useful to prescribe stimulants; nor is there any reason to doubt of their being frequently of use, allthough it is generally difficult to say to what extent, or in what manner they are necessarily continued for a long time, and a tendency to general or local excitement is always present, their effects are to be cautiously watched, and they should be omitted, whenever symptoms requiring antiphlogistic treatment present themselves."

"This caution is to be more particularly attended to, when the chest is in any way affected, the heart's action excited, irregular, or frequent, when there is a sense of internal heat, tenderness at epigastrium, or vomiting, *or when any of these have been recently removed.*

"Cajaput oil is stated by several writers to be useful in dropsy and palsy, by its stimulating and diaphoretic powers. It was used internally a good deal by one gentleman, but its effects were not very evident. As an external application it is very useful, and from the singular effect on the nerves of the eye when rubbed on the temple, by which its qualities are tested in the countries where it is procured, it would appear to have peculiar powers of stimulating the nerves of distant parts.

Camphor, assafœtida, Dover's powder, mezereon and gum guaiac have been occasionally employed, but, as far as I know, without benefit, although probably adapted to some cases.* The aromatic tincture of guaiac was used in some cases of severe pains, but without advantage; and the China root (Smilax china) a popular remedy for chronic rheumatism and secondary venereal complaints has not been of more advantage, in the hands of two of my acquaintances. Iron has been used in a good many cases, and is, as far as I have been able to judge, beneficial, principally as a general tonic. I fear the opinion of Mr. Ridley, that the tincture of muriate of iron is a powerful antispasmodic in the *acute* form of the malady, will be found to be incorrect, as indeed his own cases nearly prove; but its powerful tonic qualities have been beneficial in general debility."

As to counter-irritation, Mr. Malcolmson avers that—

"A very important part of the treatment consists in counter-irritation and external stimulants. Blisters to the chest, when the pericardium is affected, have been useful, both by the discharge and counter irritation they cause, but on the whole, their effects are not very evident. When the lungs or pleura were affected, they did good, but did not protect the patient from death by effusion or syncope. They were of decided benefit when the stomach was tender or irritable, but, as might be expected, often failed in overcoming the vomiting.

Blisters, sinapisms, tartrate of antimony, frictions, caustic issues, moxas, setons, and stimulating frictions, have been used to the spine. It has already been mentioned, that blisters to the loins were more effectual in removing pain fixed within the canal, than leeches and cupping. The power of the limbs has sometimes been increased and the numbness diminished, by blisters to the

* It deserves to be mentioned, that in that disease of the urinary organs noticed as in many circumstances analogous to this, Drs. Gregory and Bright have found cream of tartar the most effectual diuretic. I have, however, found the stomach unable to retain it, when not otherwise irritable. *Original note.*

* Mr. Davidson has found the aromatic tincture of guaiac a useful stimulant and diaphoretic, when administered with mucilage. When given in draughts it was decomposed and proved comparatively inert. The result of my experience with Dover's powder is in the text, but I have since perused cases, in which its sedative and sudorific effects were beneficial. Mr. D. also employed the vapour bath with advantage.

lower part of the spine. They seem to act merely as stimulants and counter-irritants, as the effect on the limbs was produced as soon as they acted on the skin, or even before the patient was sensible of their acting, and sinapisms were often equally and sometimes more powerful."

"Bandages to the legs have removed œdema which resisted other means, and warm clothing is necessary in all stages.* The nitro-muriatic acid bath was useless. Frictions relieve the spasmodic affections and pain, in the very worst cases; and have even restored the power of the limbs, removed numbness, pricking sensations, &c., and with blisters and more frequently sinapisms to the calves and to the soles of the feet, have been effectual in removing the torpor of the nerves, which, as in common palsy, has sometimes remained after the diseased condition by which it was caused, has been removed.†

On the subject of exercise and change of air our author observes that—

"Walking or immersion of the feet in the hot sand at noon, is a favorite remedy of the natives, and from the confidence they put in it, may be employed with benefit, as it induces convalescents to use their enfeebled limbs, and is itself a powerful stimulant to the parts, and excites free perspiration which is also useful. Frictions with the sand is employed at the same time. When it is doing good, the feet become more sensible, and the heat to which they were before unconscious can be borne only for a short time. This practice was pursued on a large scale at Chicacole, by the formation of a temporary convalescent hospital near the sea, six miles from the station, to which convalescents were sent."

"There was reason to believe, that a change after a few weeks, by a return to their own station, was beneficial; but the experience of a native practitioner, that a change within the districts where the disease prevails, is of little use, was on the whole confirmed."

Galvanism was used in the disease.

"Galvanism from fifty small plates was sent through the spine, by small blistered surfaces on the neck, sacrum, and feet, for ten minutes: after the first application he was able to walk between two men, after the second with the assistance of one, and gradually recovered. He used at the time and afterwards, nothing but bark. Another man had the peculiar pains of beriberi, and loss of power of the lower limbs; the former were removed by galvanism, but it lost its power and a stronger battery could not be procured. Another patient derived benefit from it, but he passed into other hands and the galvanism was not continued. It had much more effect when directed through the spinal cord, than along the nerves of the extremities. In one case it induced spasms of the chest, and dyspnœa. From these facts there is reason to expect, that galvanism will be of use in the removal of the paralytic symptoms, and probably of some others."

In the use of Nux vomica our author observes:

I have been disappointed in my expectations of advantage from nux vomica which has been administered in considerable doses, and the constitutional effects of the drug induced without other effect than some aggravation of the spasmodic affections of the paralytic limbs. I only used it in old cases where the palsy was the prominent symptom, but the same friend who employed galvanism successfully used nux vomica in recent examples, and to the extent, in one instance, of sixty four grains in twenty-four hours, and until the specific effects of the poison began to show themselves; but he saw no advantage result from the practice."

After all however Mr. Malcolmson observes that notwithstanding the benefit derived from the various remedies already alluded to, there is none in his opinion of certain efficacy, in order to act directly in the most important part of the diseases. He then proceeds to notice two which should possess high claims to the notice of his readers. He states that when they were first communicated they were received with distrust and even ridicule by the majority of gentlemen, on the Madras Establishment. These remedies are the "*Treak farook*" and "*oleum nigrum.*"

The former remedy was brought to the notice of the Medical Board by Dr. Wright,

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* "As tending much to strengthen the nervous system of the limb, to support its warmth, and to keep up a gentle perspiration, a flannel bandage should be rolled rather firmly round the leg after each use of the frictions." Messrs. Geddes and Macdonell.

† Dr. Pearse used fomentations containing the Moringa root, with much benefit. Dr. Herklots employed, occasionally, a poultice composed of aloes and black hellebore, which is in use with the native practitioners. It is important to be aware of these easy and effectual means, which can be prescribed to convalescents, and which will be the more diligently used by them, as being consistent with their own notions and easily procurable.

& the Hindoo practitioners had not been long acquainted with it. It was procured at Massulapatam from the Moghul merchants: it is a thick extract sold in small lead canisters containing ten or fifteen tolahs, and in others of only one tola in weight. The small ones are packed up in dozens, well rolled up in paper and cost a rupee each, and the second size is sold for five or six rupees. "Besides its use in beri beri, it is employed in Hydrabad and in Circars in numbness, rheumatism." Mr. Geddes after the trial of various other remedies states as follows:

"The only plan which appeared to have any effect in keeping of the dropsical symptoms was blood-letting, followed by daily purgatives; the disease however was not removed by them, for after a while, the œdema began to make its appearance, and being completely at a stand, I consented to the request of my patients, to be allowed to try a native medicine, which they stated had cured some of them, when affected on a previous occasion." * * * "The patients in whom the bleeding and purging had been used, but where œdema had begun to make its appearance, had the medicine exhibited to them, and in a few days the dropsical effusion had completely disappeared, and the pulse was considerably lowered. In the next case there was total paralysis in the legs and arms, the feet had been swelled for several days, and the pulse when the treeak farook was commenced was 108, next day it was at the same rate and on each successive day it was found lowered to 100, 88, and 84, by which time the œdema had disappeared, and the patient had no complaint but of the paralytic affection. In the next person to whom the medicine was given, there was not much paralysis, as he could walk, although not steadily, without assistance, his limbs however were œdematous, and his pulse on the day of commencing the treatment was 116, next day it got up to 124, after which it fell daily as follows: 106, 94, 100, 84, 84, 76, 72; the œdema was by this time removed and the patient continued to improve daily." *Mr. W. Geddes' report for the 2nd half of* 1822.

"Mr. Stevenson employed it soon after and observes that, "the treatment of this disease having hitherto proved so unsuccessful, I was led to put into practice a mode of cure suggested to me by Mr. assistant surgeon Geddes, 1st. batt. 11th regt. Native Infantry, who has lately used a native medicine of the name of 'teriac farook; in two cases solely treated by that medicine I entirely coincide in opinion with that gentleman, regarding its singular power on the state of the pulse and in removing œdema; the pulse in one case being reduced from 100, and in the other from 90 to the other healthy standard in two days, and in the course of four days the œdema had entirely disappeared, and the patients are now convalescent; considering the repeated disappointment in the treatment of beriberi, I am of opinion that the medicine in question merits a further trial."

Mr. Malcolmson then proceeds to state—

"Another gentleman informed me, that he found it produce rapid absorption of the effused fluid but did not observe that the pulse was affected, nor in the few cases he employed it in, that the palsy was much benefited. In the experience of others its influence over the palsy has been clearly ascertained, and in differing in some degree from the opinions of Mr. Geddes, I hope I shall not be supposed to do so, with any view to lessen the gratitude the medical men of the circars owe him, for adding what appears to be so valuable a medicine to the meteria medica; and saving them the mortification and discredit, of seeing their patients whom they had in vain attempted to cure, recover under the empirical treatment of natives. The prescription employed by Mr. Geddes was treeak ʒiij, rhubarb ʒij ʒv, cinnamon ϑij, cloves gr. xxi. made into a mass with honey, of which four scruples and a half are taken every morning with honey, and is said to procure four or five stools daily. The patient is directed to eat animal food, wheaten cakes and milk, and to drink warm water (of which as common drink the natives are fond). As the quantities of these ingredients are reduced from native weights, the minute proportions given, neither justify distrust nor demand observance. I have therefore sometimes employed the following, which I received from an experienced native practitioner, who administered it to several patients under my inspection. One rupee weight to treeak, six of rhubarb and of honey, made into a mass and divided into fourteen large boluses, of which one is taken in the morning and at noon. The general effect of this on the bowels was stated to be two or three stools a day, which I have found correct, and six if there were anasarca, which is probably a just observation. But as this was convenient in prescription, and such large pills could not be swallowed by Europeans, and as there was no danger of mistake, I substituted the following: pulv. rhei ʒijss, treeak farook ʒss, confect. aromat. ʒss, mel. q. s. Fiat mass. et divide in bol. xviii; which were divided into pills, of the size the pa-

tient could most easily swallow, and were found to answer very well."

The following observations are important.

"The treak was sometimes prescribed alone, but in doses of from four grains to fifteen had no sensible effect, unless perhaps in a slight degree constipating the bowels. The urine did not appear to be increased by it, even when all the symptoms had yielded to it or to other remedies. When the case was of long standing, the palsy confirmed, and the urine either scanty, or copious and alkaline, the treeak was equally useless as a remedy for the anasarca as for the paralytic symptoms; and when it was only had recourse to as a last resource, after other means had failed, the patient frequently died the first day or two after commencing its use. It is therefore necessary to employ it early, and to this, is in a great measure to be ascribed, the greater success of this remedy in the hands of Mr. Geddes and others who were favourably impressed with its usefulness, than in those of gentlemen who were of a different opinion and by whom I observed the remedy to be given, when success could not be expected from it."

Mr. Malcolmson purchased some canisters of the Treak and he adds that,

"The larger canisters had on the lids a head well executed and surrounded with a wreath of laurel, and on one of them the following legend in fine roman capitals, TERIACA F. ALI. A. TESTA. DORO. IN. TRIESTE. Two half sheets of paper, ornamented with a gilded head, containing a long account of the medicine well printed, the one in Turkish and the other in modern Greek, are wrapped round each packet, and to many the signature of Eredi L. B. Silvestrini is attached, who appears, from the inscription around the head, to be an apothecary on the Rialto at Venice. Some of the papers bear the words "Ponte de Rialto" and others "Strazzo d'oro" "in Venezia", and common Italian notes and printed lists of drugs, some of which are curious, * are wrapped round the packet, within the others papers. (Having procured, through Mr. Thacker of Calcutta, a translation of one of these papers, the following extract from it will leave no doubt of the medicine being procured from Venice, of whose commerce with India it is one of the last remnants.

"Theriakh of Andromachi. An invention of Theron, the Presbyter. It is prepared, measured, and made public by me, John Baptist Sylvestrius, in the Rialto, by the authority of the excellent Governments, physicians, of ancient righteousness, and of the council of the apothecaries and learned physicians."

"The within mentioned treacle is prepared in Venice with every care and faithfulness by me, John Baptist Sylvestrius, Apothecary in the Signal *Testa d' oro* in St. Bartholomy, in the presence of excellent and superior physicians of ancient righteousness, and of the assembly of apothecaries and others connected with the medical institution. The virtues and properties of the treacle are particularized below, in common benevolence and for the good of the public." A long list of diseases for which it is an infallible remedy follows, and the paper concludes by informing its readers, that other diseases are omitted as the name of this medicine is universally known throughout the world;" and that the young and strong should use it in small doses, and that the old and those accustomed to the use of opiates may take it more freely, but still in small quantity."

"The treeak farook being thus identified with this celebrated compound, we can more easily appreciate the effects which it appears to produce in this disease; and while we are not to expect it to exert any specific powers over the heart, the known composition of the drug itself, and the combination in which it is given, are such as to confirm the inferences as to its virtues suggested by the whole mass of evidence for and against it, and cannot fail to suggest important improvements in the combinations employed by those, who may not chuse to adopt the empirical and expensive remedy itself. Nor will it be difficult to compose a formula containing the more important purgative, diuretic, stimulating and anodyne medicines which enter into its composition.)"*

"When of good quality, the taste of the treeak is at first sweetish, then nauseous, hot and acrid; its smell is aromatic and resembles sprnce, which, and it is alleged, the information obtained from some traders from the Persian gulf, has led to the occasional substitution of that article for the genuine; and its comparative cheapness will probably lead to frauds fatal to

* The following is a specimen. Liquor. Corn. Cerv; Lignum Nefriticum; Liquor. Nitri fixi; Magisterium Antimon; Magisterium Jovis; Lima Caustica. *Original note.*"

* Some additional information on this subject will be found in the appendix. The paragraph within brackets has been substituted, for a few sentences of the original paper which have been omitted, as the translation of the envelopes obtained soon after, superseded the incorrect speculations on the nature of the compound, contained in them.

the character of the remedy."* The small canisters should also be avoided, as they do not appear to be of equal quality and are sometimes half empty."

"It is right however to state, that the treeak farook has been considered by several medical men who have used it, as devoid of those effects in beriberi which have been ascribed to it, and it has been supposed that the diet attending its exhibition has had the chief share in producing those advantages, which seem at first to be the result of the medicine. It is certain, that without the aid of a nourishing diet, little permanent relief has been shown to have been obtained by the use of the treeak, but when genuine and fresh, the cordial and stomachic properties admitted to belong to the theriaca venetiana, combined with the gentle laxative effect of those medicines with which it is given, must tend to assist digestion and assimilation, and to aid in improving generally the tone and energy of the whole body. In producing this effect however, generally, it must be admitted that medicines can only act as auxilliary means of cure. Nourishing diet particularly the use of milk, exercise where practicable, or frictions if the patient cannot walk, change of place involving as it does a removal from the atmosphere in which the patient has been seized, with its concurring consequences of mental excitement and exercise, will do more of themselves, it is believed, for the recovery of the patient, than any remedies which could be given without their assistance."

* Dr. Herklots was induced by this similarity in appearance and smell to employ the extract of spruce in beriberi, but he found it to have no effect. The following observations on the treeak are extracted from his second half yearly report for 1823.

"Instead of commencing witht he oleum-nigrum you may begin with another remedy which I shall term here *bolus ex teereeaq farooq*, since the chief ingredient in its composition is a medicine called teereeaq farooq used by natives all over the country, and considered by them as a most sovereign remedy: though according to my experience on the subject, after trying it in a variety of cases, I must confess it falls far short of the oleum nigrum; however it deserves the second rank; it possesses the same virtues with its predecessor, but in a weaker degree; it removes œdema in a few days, but not in quite so short a time as the oil. As rhubarb enters into the composition of its boluses (which will procure three or four evacuations daily), there is no occasion to interpose cathartics as in the former case, but the boluses (fourteen in number) are to be taken morning and evening for seven days, during which time as well as throughout the whole complaint, the patient is to adhere to the full diet mentioned before."

With reference to the use of the oleum nigrum Mr. Malcolmson observes

"It has already been observed, that the proportion of deaths in cases of beriberi was remarkably diminished throughout the division, at the time the black oil came into general use, which I had the best means of knowing, having supplied a large portion of the corps with the oil or directions for its manufacture. But it has been in Dr. Herklots' experience that it had the most astonishing effects, that gentleman having lost only one patient in fifty cases of beriberi treated by it, while he had eleven deaths out of fifteen, before he adopted the native treatment.* Although unacquainted with Dr. Herklots, I have had opportunity of knowing, that his intimate knowledge of the language and opinions of the natives had acquired him their confidence, which was increased by his use in practice of their own remedies and diet.

"Dr. Herklots gave fifteen drops of the oil twice a day, which, he states, mitigate the symptoms the second day, and the œdema begins to lessen; on the fourth it is gone and the patient is much better; on the sixth or seventh day the medicine may be omitted, and is never to be continued more than fifteen. If it prove too heating the number of drops may be diminished.

"The diet directed by Dr. Herklots, viz. water and wheaten cakes, has generally been followed.

The following is a description of the preparation of the oleum nigrum.

"It is prepared in the following manner. Into an earthen pot whose bottom is perforated by a number of small holes, are put malkungnee seeds lbijss, benzoin, cloves, nutmegs, mace, of each ℥ss; the mouth is closed and the pot placed over another and luted to it. They are then placed in a pit three feet deep and nearly as wide, and surrounded by cakes of dry cow dung which are set on fire, and when they are consumed about six ounces of the oil is found in the under vessel ready for use. It should be kept in well closed bottles. As we would expect from the nature of the process, the appearance and sensible qualities of the product resemble those of an empyreumatic oil, possessing the peculiar powers of the principal ingredient, the malkungnee seeds. These do not appear to be the produce of the circars, or, as far as I can learn, of the Deccan, but Mr. Royle

* More than one half of the admissions with beriberi, died in the jail of Masulipatam, in ten years, during which it was in charge of a succession of the most skilful and experienced surgeons in India. Bleeding was used freely and judiciously. *Original note.*

has included them in a list of Indian materia medica, and states that the plant is the Celastrus nutans.* It is stated by Hukeem Mahomed Hussein Khan to be a native of Hindoostan, and the seeds are imported from Calcutta or brought to the circars from Hyderabad, and are only found in the principal towns, where they are kept in bags containing the seeds, seed vessels and stalks, from which the genus can be ascertained, as was done by Dr. Wight some years before the publication of Mr. Royle's catalogue. The name used in Hindoostan has been introduced into Arabic, Persian, Teloogoo, and Tamul. A tree called by the Mahrattas "malkanee," the seeds of which afford an oil, grows in the forest of Dongatal north of Nagpore."

Such is the analysis of Mr. Malcolmson's work: We have considered it our duty to give so full a notice of it, because, we do not see any reference that it is for sale, and secondly that Medical men in India, so great a part of whom are readers of our work, be put in possession of the character and treatment of this extraordinary disease. Considering Mr. Malcolmson's abilities and labours, we cannot say too much in his praise. But we would recommend him to get up another edition of the work, to exchange the whole of his references to other works to which we have alluded in our August number, and keep his own and colleagues practical information as regards the history, causes, diagnosis, symptoms, and treatment; and we are satisfied it will then be received as a standard work on this subject, and Mr. Malcolmson will unquestionably be classed among the first rate Medical writers of the day.

* I have since found the plant, growing in the jungles which cover the primitive hills of Ramteak north of Nagpore, and in similar situations in the neighhourhood of Hyderabad. Roxburgh, also, obtained living plants from the Mysore and introduced them into the botanic garden of Calcutta, where Dr. Wallich found six plants, of which only one is hermaphrodite and fertile, all the rest male-hermaphrodites and barren. Two varieties were pointed out to me in the Hyderabad jungles, the leaves of one of which were smaller, and it in no instance bore fruit. The other plants were in fruit in October and November. Dr. Wight is of opinion, that the Celastrus paniculata of Roxburgh, who had only seen dried specimens obtained from the circar mountains, is the same with his C. nutans. The malkungnees must be rare in the circars, as neither Dr. Wight nor myself could obtain any specimens in these districts; it is, however, always a scarce plant.

HOSPITAL REPORTS.

The following are three cases, and the only ones on record, which have been treated by the magnetic wheel under the care of our friend Dr. Robert Tytler.

THREE ATTESTED CASES OF THREE SEPARATE DISEASES TREATED BY MAGNETISM BY DR ROBERT TYTLER.

CASE I.—*Congenital Rheumatism.*

To R. TYTLER, ESQ. M. D. *Surgeon 34th Regt. N. I. Midnapore.*

Sir,—I beg to state, that the pain in both of the legs of my boy,* which he had been subject to almost from his infancy, after an intermission of every two or three days, has been now entirely removed by your kind application of the magnetic wheel three times, to the calves of his legs; for which cure I beg to offer my sincere thanks, in return for the trouble you have taken.

I am, Sir, your most obdt. servt.

(Signed) J. SINAES.

Midnapore, 14th August, 1835.

CASE II.—*Paralysis of the fingers.*

To R. TYTLER, ESQUIRE, M. D. *Surgeon, 34th Regt. N. I. Midnapore.*

Sir,—I beg to state that the application of the magnetic wheel to the thumb and fingers of the right hand of my wife had the desired effect, in removing the paralysis; with which she had been affected during the last twelve months. I am happy to say that she can now sew, comb her hair, &c., with ease. I beg to offer you my sincere and grateful thanks for the trouble you have taken.

I have the honor, to be, Sir,

Your most obdt. servt.

(Signed) FRA. MIRANDA.

Midnapore, 27th August, 1835.

CASE III.—*Indurated Testicle.*

Midnapore, 26th August, 1835.

Sir,—I beg leave to inform you, that in the month of March 1835, my right testicle became much inflamed and swelled. Leeches were applied, and I obtained some relief. But about a month after it became insensible to the touch; and so heavy, that I could not move about, without supporting it. I applied

* His son, about 12 years of age.

to you in the latter end of June, when you were pleased to apply the magnetic wheel, and after the second application it became acutely sensible. Since which I have undergone the same operation five times, and am happy to state, that it is now reduced to its natural size, and I do not feel any inconvenience from it; and I beg that you will be pleased to accept my most humble thanks for the relief you have kindly rendered me.

I am, Sir,

Your obdt. and humble. servt.

(Signed) W. CHORDE.

Serjt. Major, 34th Regt. N. I.

To R. TYTLER, M. D.

Surgeon, 34th Regt. N. I.

We feel ourselves under many obligations to Mr. Hunter for the following valuable clinical report on Pectoral disease and also for his other promised communications. Nothing can be more important and profitable to the Medical practitioner than such papers as these and which cannot fail to raise the value of the use of the Stethoscope in the estimation of our brethren both in Europe and in India. It is now fully ascertertained in Europe that auscultation is capable of affording the greatest accuracy in recognizing the most complicated forms of pulmonary disease, and therefore tends to the most important results in the cure or mitigation of acute symptoms in Thoracic affections.

ON PECTORAL DISEASE BY R. S. H. HUNTER, ESQ ASSISTANT SURGEON, 2ND REGIMENT OR QUEENS ROYAL.

T. May, ætat. 31,—Light Company, fourteen years service, nine in India, admitted 14th November, 1834, states that he has, for the last three years, had a gradually increasing beating in the neck and left breast, the former was first pointed ont to him by a comrade that of late he has also been subject to fits of palpitation and dyspnœa on exertion; headache and ringing in his ears, the latter particularly in the horizontal posture, together with restless nights from dreams and nightmare. His aspect is rather sallow and eyes sunk, perhaps naturally so. Apyrexia, P. on admission 106, full, and strong; now (1st December) from 76 to 84, of moderate volume but harsh.

Physical signs. Condition healthy, thorax well formed, heart betwixt left five and six cartilages; carotids from sternum to angles of jaw, and inguinal arteries, strongly pulsating, deficient resouance over 5, 6, or 7 cartilages of left side, but nearly confined to these. Permanent, harsh, double saw and rasp sounds over all the chest anteriorly, in the following order; right 1st and 2nd cartilages; upper third of sternum; lower thirds, and left 6 and 7 cartilages, rest of cardiac region, and to the right of sternum in mammary. Left subclavian, becoming single outwardly. With the stopper in, sound accompanying systole, over right 1st and 2d cartilages, strong and rasping. That accompanying diastole more soft and prolonged. Over lower third of sternum and left 6 and 7 cartilages, loud and prolonged accompanying diastole. Accompanying systole, scarcely appreciable, impulse strong and heaving over 5, 6, and 7 cartilages left side, and perceptible outwardly as far as lateral region. Single, harsh bellows sound over both clavicles at their sternal junction, with strong pulsation and purring tremor over the right, and upper part of sternum. Respiration in a great measure marked anteriorly, but audible and without morbid murmur.

Diagnosis. Tricuspid valves in a morbid state, not opening perfectly. Dilatation of aorta; hypertrophy with dilatation of left ventricle.

Prognosis. Death within twelve months. Of course much depends upon keeping the circulation calm.

Our diagnosis is here founded upon the following circumstances. 1st. The impulse in left cardiac region, and the strong pulsations &c. sufficiently indicate hypertrophy with dilatation of left ventricle, though from the volume of the pulse, and limited extent of dull sound on percussion, I do not think the latter can be to a great degree. Dilatation of aorta, and morbid state of its lining membrane, is indicated by the strong pulsation, purring tremor and harshness of the rasp sound, synchronous with the systole, in the aortic region, whilst with the stopper in, it is scarcely appreciable over the ventricles.

Again the 2nd sound is equally distinct over the region of the right ventricle, and therefore we consider its site to be in the valves; and as the sound is prolonged, so unlike the natural sound of diastole, we conceive it to be caused by the increased length of time required for the passage of the blood through a contracted valve. That it is the tricuspid, we presume, because the sound is much louder over the right than left ventricle, and because the brain seems to suffer, and not the lungs. It is true, however, the sound might be better heard over the right, though it did proceed from the left ventricle, hypertrophy being always less marked in the septum, and consequently affording less ob-

struction to the transmission of sound in that direction. The dreams and nightmare may also depend primarily on oppressed lungs, when deprived by sleep of the influence of the will. As he is kept quietly in hospital, no opportunity is afforded to mark the effects of exertion either on the brain or lungs. Another thing in favour of this view, is the comparative rareness of disease of the tricuspid, to that of the mitral valves.

Since admission both the symptoms and physical signs have become more marked, and the paroxysms of palpitation more violent, with frequent intermissions, followed by strong, harsh blows, very unpleasant to the ear, and pains which he compares to small knives all over his body, more particularly, of late, in his head. By regulated diet, however, occasional small bleedings, and perfect quiet, these are kept under frequently for two or three weeks at a time, and at present he feels so well that he wishes to return to his duty. The stethoscope, however, too plainly indicates that particularly the hypertrophy is, with all our care, on the increase; and I don't see what good can be done, the hypertrophy being a secondary affection, and absolutely necessary to carry on the circulation.

We beg to refer our readers to page 172 of the May number in which will be found the case to which Mr. Hunter alludes in the following.

DISSECTION REPORT BY DR. COLLIER, PROMISED IN MY LAST,—M. MADDEN.

"Cartilaginous thickening, and consequent permanently open slit-like opening in the mitral valve. Left auricle enormously dilated (five or six times its natural size); right auricle dilated to twice its natural size. Left ventricle unaltered—aorta natural. A pint of fluid in the pericardium." Where is the hypertrophy! The heaving impulse must have been caused by the immense size of the organ from the dilated auricles; and true! I recollect the raised portion of cardiac region, where the heaving was, was high, over the 4th cartilage, or between the 3d and 4th as its centre. However, hypertrophy of the ventricle might have been confidently looked for, as a natural consequence of increased (muscular) action. There was no notice taken of the state of the aorta in the other case, that of M. Brady. I had written to Bombay on the subject, but receiving no answer, thought perhaps it had been overlooked. It seems, however, also to have been preserved for Dr. C. as the following with the above was received on the 10th February. "M. Brady;" Aneurism of aorta, at its base 1¼ inch above semilunar valves, and which had given way and caused the pulmonary apoplexy (effusion into the chest?). The aperture might admit the little finger. The calibre of the artery greatly enlarged and thickened, rugous and irregular."

Phthisis.—I. H.—Ætat. 27—9 years service, three months in India; admitted 23d December 1834, 11th February 1835, states that he enjoyed good health till four months ago, when on passage out to Bombay he slept some hours on deck in the rain, and was immediately after seized with spitting of blood, and other slight pectoral symptoms, but soon got well without any particular treatment, having been supposed, he says, malingering.

Had a similar attack on the morning of admission. Delicate aspect, apyrexia, except some dyspnœa on exertion, says he feels quite well, and wishes to return to his duty.

Physical signs. Deficient resonance (comparatively) in right subclavian, and upper part of mammary region. Respiration puerile over all the left chest, and very distinct in lower part of right mammary, and subscapular regions, perceptible in axillary and right subclavian, with mucus rale under clavicle, audible for a few seconds after coughing. Bronchophony in same part. Heart's sound clear in cardiac region, and perceptible in both subclavian, particularly the right, being in a great measure marked by the respiration in left. Systole short and sharp, impulse not evident.

Diagnosis: Tubercles in upper and middle lobes of right lung, beginning to soften in foramen, weak heart.

Prognosis. Most probably death within six months of phthisis.

This case will perhaps not be the less valuable for its clearness, whether we look to its history and symptoms, or physical signs. Neither perhaps of themselves were sufficient to give such an unfavourable prognosis, but when conjoined, it amounted to a certainty, at least that a vomica was about to form. There are now cough, copious expectoration, and hectic—under right clavicle, there are imperfect pector lodging, cavernous cough, respiration and rale, the matter on coughing sounding like a large cavity filled with fluid and air, (a perfect gurgling.) There is another cavity I think forming under point of right scapula, but as he is very weak, and there is no sufficient object to gain, no particular examination has been made.

It will not fail to be remarked that this patient, when on board ship, was supposed to be malingering; and there is, indeed, much reason to fear this is the too frequent conclusion of the indolent and the ignorant. Were it for this alone, so intimately connected with the invaliding department, the

Army and Navy Medical officer cannot make himself too well acquainted with every aid to diagnosis, from the stethoscope to simple inspection and palpitation. It is to be hoped, however, a new day is dawning upon the Medical world.

We shall endeavour in our next to give a case or two of other varieties of pectoral disease. Pneumonia or pleuritis, as primary affections, we have not met with at Poona, but we have two or three of pleuroclym, so closely resembling the latter, as not to be distinguishable by the symptoms. Bronchitis is very frequent.

Camp, Poona, 31st May, 1835.

THE INDIA
JOURNAL OF MEDICAL SCIENCE.

CALCUTTA: OCTOBER 1, 1835.

THE LATE WILLIAM TWINING, ESQ.—It will be perceived by the proceedings of the Medical & Physical Society, on the 5th ultimo, that, in token of the respect which the Society wished to testify to the memory of the late William Twining Esq. before the regular business of the evening was commenced, the meeting was dissolved. The members present however remained, and constituted themselves into a meeting of the members of the Medical service, and proceeded to consider the best means to be adopted for raising a lasting testimonial of the high sense the Medical service in India entertained for Mr. Twining's indefatigable zeal and great merits in promoting the objects of Medical science in this country.

The meeting was of one mind on this interesting and melancholy occasion; and if there was any difference of opinion, it proceeded solely from an anxiety in each member present to excel the others, in affording proof that Medical men in India were not insensible to the great loss their service had sustained by the death of Mr. Twining. We regret, however, that this meeting of the members of the Medical service was not advertized, by which omission many gentlemen who were not members of the Society were unavoidably but unnecessarily excluded from attending, and deprived of the pleasure they would have experienced in taking a share in the proceedings of the evening. The admirable likeness of Mr. Twining, which we have given in our present number, has been taken by Mr. C Grant from a cast in possession of Mr. Thomson.

ANCIENT CONSTITUTION OF THE MEDICAL DEPARTMENT IN THE KING'S NAVY AND ARMY.—It is during the time of peace that the servants of the state, who have the management of its separate departments, should examine well into the arrangements adopted during war, and point out, for the guidance of Government, those parts which were found to be defective and injurious. It is also the duty of the public Journalist to offer suggestions on measures of this public nature. Experience has shewn that plans admirably concerted for the conduct of large Military forces, which would otherwise have proved successful, have failed for want of attention to those means which preserve the health and guard against the operation of deranging causes. It is at least acknowledged, that although mortality is the inheritance of man as well as a susceptibility to disease, yet the hand of death may within the limited span of his sojournment be often averted by Medical means.

The application then of this knowledge of means to the concerns of the army is rendered politically expedient, not only with the view of preserving the activity and preventing the destruction of its elementary parts, but with that of insuring efficiency in the Military fabric. The management of the health of a large Military Force is an object of vast importance, not only in regard to its ultimate effect, but as to its means of accomplishment. The first of these did not occupy the attention of those who had to legislate for the Navy and Army in the King's service until it was discovered that more seamen and troops died from sickness and mismanagement than by the sword; and experience admonished that the act of preserving health, and speedily restoring it when lost, depended entirely upon the means of securing a well educated and efficient Medical department. Reverting

to the early period of our Naval and Military History, we find that the Medical department was composed of a body of men not only illiterate, but really despicable in the eyes of their brother officers. Their character has been faithfully pourtrayed and censured by that admirable writer Smollet ; and indeed so degrading was the situation of a Naval Surgeon, rendered by the demeaning grades he had to go through and more so by the smallness of his pay, that few men of feeling, education, or respectability could be found to accept such an appointment. The Military Surgeon was only a degree better off; so that the important object —namely the preservation of health in the Army and the Navy—was entirely disregarded.

In our editorial on the abolition of the Superintending Surgeoncies we have already adverted to the fact that the History of the Peninsular Campaign exhibited a regularity in the fluctuations of sickness which evidently depended, not only upon the quality of the soldier, his diet, his quartering, and his parade, but upon the nature of the service, the climate, and the seasons of the year. These were obviously subjects of serious consideration and critical enquiry, and they have now been ascertained to admit of an accurate calculation, or in other words these effects are foreseen with such certainty by the well educated and experienced Medical officer, that it amounts to neglect of duty if they are not anticipated to a certain extent. By this foreknowledge preventive measures are adopted, and thus any serious visitation or alarming progress of disease averted. The remedies intended to combat the disease, are calculated with almost mathematical precision, and are always in readiness and at command, measured in proper quantities, and proportioned exactly to the purposes for which it is expected they would be required.

But who could be supposed to possess this fore-knowledge? Surely not ignorant, inexperienced men? Conceive the duty devolving on a Smollet's Morgan, or one who has never acquired knowledge beyond that of the compounder's shop or Apothecaries' Hall; yet such were the men to whom these important duties were once entrusted. Generals commanding armies, or Admirals commanding Fleets, seeing the ignorance of such men holding Medical appointments, often preferred making their own calculations and becoming themselves the Directors of Medical arrangements of the Force or the Fleet. The Medical assistants, with some few exceptions, had no experience for the direction of the Medical department, and could not properly be entrusted with field information in regard to the designs of the Military or the Civil authorities : they were scarcely acquainted with the progress or the ravages of disease, consequent on the periodical operations of natural causes. They were not men whose experience and enlightened studies would prepare them to anticipate those of an adventitious nature, such as epidemics of temporary duration; and consequently evils of direful magnitude, in the form of pestilence, often swept away armies to a man. This was ascribable to an ignorant, inefficient Medical department. Surgeons were neither qualified by scholastic nor Medical education, and such as were provided were few in number, not equal to the strength of the army. Added to their ignorance, they were negligent and incompetent, and in every way unfit for an efficient discharge of their professional duties. The Medical Board was a mere name and as inefficient as the members of the department: so that the appointment of the Medical staff did not originate with them, but was a part of the patronage of the Commander in Chief. The Inspector and Deputy Inspector had not attained a knowledge from experience and observation of the Medical duties of an army, neither were they a class of men whose minds were well stored with Physiological and Medical Science—the fruits of professional study. What could be expected from such materiel, what inducement was there held out for ensuring the fruits of study for the benefits of the army—for attaching an able, well educated, and respectable class of Surgeons to the Military service? Per-

sons well acquainted with their profession were not to be obtained. That efficiency could be acquired only by an expensive, laborious, anxious, and tedious course of study which alone can produce men who are capable of investigating the nature of deranging causes, of ascertaining their presence, of pointing out the means of obviating their effects, and of keeping the materiel of a moving army in order, by preserving its health, adopting suitable provisions for dis embarrassing the Military movements, and by removing its inefficient parts by well organized arrangements. Would such a well instructed and able body of men enlist in a service to be degraded, so inadequately remunerated, and so laboriously worked? Experience proved they would not. A system was therefore adopted to remove the cause which operated to deter respectable men from entering the King's service; but nothing was effectually done until the Duke of York had, by information derived from official reports, ascertained that it demanded particular attention in arranging the Medical concerns of an army. In a future number we will shew the important changes which His Highness caused to be made in the Medical Department, and point out their effects on that service as it is now constituted.

MEDICAL AND PHYSICAL SOCIETY'S MEETING.

Saturday, Sept. 5th, 1835.

J. Langstaff, Esq. 1st member, Medical Board, in the Chair.

The Secretary opened the meeting by recapitulating the proceedings of the preceding meeting when the following gentlemen proposed on that occasion were ballotted for and unanimously elected. John Sawers, Esquire, officiating 3rd member of the Medical Board of Bengal, and John Scott, Esq. Secretary to the Medical Board of Bombay, were proposed as members of the Society. G. Harding, Esq. Assist. Surgeon Madras establishment withdrew his name from the list of members of the society.

The following works were presented to the Library, viz:

"The first and second volumes of a descriptive and illustrative Catalogue of the Physiological series of Comparative Anatomy, contained in the Museum of the Royal College of Surgeons of London; presented by the Royal College. The following original communications were presented at the meeting. A sketch of the progress of European Medicine in India, by H. H. Goodeve, Esq., professor in the New Medical College. Notes of two cases of Rupture of the spleen, by A. Campbell, Esq, Assistant Surgeon, Nipâl. A case of Snake Bite, successfully treated by blood-letting and large doses of Ammonia, by T. J. Smith, Esq., Assistant Surgeon, Horse Artillery, Bangalore. A case of Indurated Testicle, successfully treated by Magnetism, by R. Tytler, Esq. M. D., presented by the Medical Board."

Mr. Hutchinson now rose and begged to read from a written address his sentitiments on the lamented death of Mr. Twining, the purport of which was to express the great loss the Society had experienced "by the death of one of its brightest ornaments and most indefatigable supporters." He did not attempt to trace an outline of the professional career of the late Mr. Twining, but contented himself by stating that after serving his country honorably both in the Peninsula and Continent of Europe he came to share the fortunes of his brethren here. Mr. Hutchinson then proceeded to allude to Mr. Twining's thorough knowledge of his profession, and observed that it was owing to his unremitting attention to his duties that he had secured for himself extensive and valuable medical practice, to an unremitting love of professional research in himself, he united the more useful power of inspiring others with a portion of his zeal! To him Mr. Hutchinson said the society was indebted "for a series of the most masterly contributions that have ever been made to Indian Medical Science," and he despaired of finding such another cautious and experienced physician as Mr. Twining was, to conduct the trials of new remedies and to initiate and instruct the young practitioner into the peculiarities of Indian Medical practice. Mr. Hutchinson concluded this address by proposing that besides other tributes, which would be submitted for

consideration "a biographical memoir of the late Mr. Twining be drawn up under the superintendence of the committee of papers and prefixed to the volume of the Society's Transactions now in the press," and that the Medical and Physical Society do adjourn till the first Saturday in October next. This resolution was unanimously agreed to, and the Meeting was dissolved.

A MEETING OF THE MEMBERS OF THE MEDICAL PROFESSION IN INDIA.

Saturday, Sept. 5th, 1835.

J. Langstaff, Esq. first member of the Medical Board, in the chair.

Mr. Langstaff addressed the Meeting, and said that he was particularly desirous of drawing the attention of the Medical and Physical Society to the loss it had experienced by the death of Mr. Twining. Whether he considered that loss as of one of the ablest contributors to the Transactions of the Society or as of one who zealously protected its interests, he was satisfied Mr. Twining had strong claims on the gratitude of every one of its members. It was not necessary for him to enlarge upon merits so generally appreciated as those of that lamented individual, and he would therefore call upon the gentleman who had to move the first resolution to proceed to business.

Mr. Egerton then rose and addressed the meeting, and adverting to Mr. Twining's brilliant career in India, observed that he had rendered to the Medical and Physical Society incalculable benefits. In his intercourse with the community he was kind to all. Personally attached as he had been to his departed friend, he could dwell long on his many amiable and excellent qualities; but after what had fallen from Mr. Langstaff he would not detain the meeting but conclude by proposing,—

"That such gentlemen now present, as may be desirous of testifying their sense of the public and private worth of the late Mr. Twining, be requested to remain and form themselves into a meeting of the Medical profession, for the purpose of considering and deciding on the most suitable mark of respect to pay to the memory of that highly esteemed individual."

This resolution, on being seconded by Dr. Strong, was put and carried unanimously. Dr. Mellis said he fully concurred in the sentiments which had been expressed by his friends who preceded him, and therefore begged to propose,—

"That while this meeting is of opinion, that the Medical and Physical Society of Calcutta has done much to elevate the character of the Medical Service throughout India, by encouraging and promoting a love of Medical research, it is impressed with the conviction, that to no individual is that Society more indebted than to the late Mr. Twining, not only for the valuable contributions which from time to time he made to its Transactions, but for the active and unremitting interest, which from first to last he continued to take in its proceedings and welfare, and that it is accordingly fitting, and no doubt the desire of by far the greater number of the Members of the Society and of the Medical profession in India generally, to mark individually the sense they entertain of his services, of his high professional attainments, and of the unassuming private worth, which rendered him ever ready to communicate with cheerfulness to others the result of his great experience."

This resolution was seconded by Mr. Egerton and carried unanimously.

Mr. Bramley then rose and spoke nearly as follows:

Gentlemen,—In rising to submit the next proposition for the approval of this meeting, I feel that little is left for me to say, after the ample, though well merited, eulogium which has been bestowed, in testimony of the public and professional worth of our departed brother. I am content, therefore, to add my full and cordial concurrence in all that has been so ably expressed by the gentlemen who have preceded me. For, however, much I might desire, to raise my humble voice in praise of departed excellence, I wil not presume to suppose that any comments of mine are requisite to strengthen the unanimity of our purpose. It is sufficient that I cherish the conviction, that whatever indifference may exist in the minds of Medical men generally as to the value or otherwise of

professional opinions on any particular subject, which an individual member of that profession may think fit to advocate, that no one, at least, will venture to deny, that some tribute is due to him, whose memory we are now met to perpetuate; he who so successfully and unremittingly slaved I may say, for the general good of mankind, and to whose sagacity and zealous exertions in the cause of science, we are indebted for so much important information, on the nature and treatment of disease in this vast territory.

As an individual, however, I eagerly avail myself of the occasion which now calls us together, to offer my humble yet sincere acknowledgment for many kindnesses I had received at his hands. I take pride in saying that almost from the period of my arrival in this country, I had the honor to enjoy an uninterrupted friendly intimacy with the late Mr. Twining. That oftentimes in the performance of professional duty, I had occasion to seek and ask his counsel, and I hold it to be but justice to his memory to record, that the promptness with which that advice was invariably tendered, engenders in my mind the most gratifying, and, I should hope, the most lasting remembrance of his past kindness. Indeed, were it not that I should occupy the time of this meeting I could advert to the friendly support I have received from him, in my present more public capacity. Above all, gentlemen, I am unwilling to permit the present opportunity to escape, without avowing the deep obligation I was under to him, in connection with the Medical and Physical Society, for his valuable aid and assistance, when conducting the duties of its Secretaryship. When holding that office, gentlemen, I had good opportunities of knowing, that in him was to be found the moving spirit of the machine—the very anchor of its constitution. And I can say, in strict truth, that without his aid, I never could have aspired to the hope of succeeding in that office, to the satisfaction of those who did me the honor to select me.

Gentlemen, I trust I may bespeak your indulgence for having embraced this occasion, to express my individual sentiments; but when I assure this meeting, that these have been offered, in the spirit of true sincerity and with the profoundest respect for the memory of my friend, William Twining, I need not apologize.

I will now take the liberty of reading my proposition, which, I anticipate, will be received as unanimously as those which have preceded it.

"That in furtherance of the object contained in the previous resolution a subscription book be opened, to be forwarded to every member of the medical profession in India, for the purpose of collecting funds, wherewith to defray the expences of such tribute to the memory of the late Mr. Twining, as may hereafter be determined on."

This was seconded by Dr. Ranken, and carried unanimously.

Mr. Garden considered it unnecessary for him to preface the resolution he was about to propose with any lengthened remarks on the many excellencies which were so conspicuous in Mr. Twining; but he could not help adverting to that lamented individual's indefatigable zeal in the discharge of his professional duties. In the sickly season which preceded the last Mr. Twining's great and arduous duties were well known. During that trying period he often devoted two or three hours daily to his patients in the hospital—a duty he deemed paramount to his private practice; in which notwithstanding he was surpassed by none for unceasing attention. With these remarks he begged to propose,—

"That with the funds so collected, a monument, bearing a suitable inscription, be erected over the grave of the late Mr. Twining, and that with any surplus which may remain a portrait, if possible, be procured and placed in the apartments of the Medical and Physical Society."

This resolution was seconded by Dr. Dempster, and about to be put when Dr. Goodeve addressed the meeting.

I was about to second Mr. Garden's motion, but Dr. Demspter has anticipated my

wishes. I cannot however allow this occasion to pass by without expressing my deep sense of the loss which we have sustained by the death of Mr. Twining. Other and far abler tongues have done justice to his merits and it will be unnecessary for me therefore to dwell upon them; but I felt myself bound by the unremitting kindness which I have experienced from our lamented friend, ever since my arrival in this country, not to give a mere silent vote, upon this melancholy subject. I beg therefore most cordially to agree in the promotion of any measures by which we can do honor to Mr. Twining's memory, and to state that I think Mr. Garden's proposition well calculated to effect such a desirable object.

Dr. Mellis said that before the proposition by Mr. Garden was submitted to the meeting he begged to state his objections to it. He thought of another way in which they might do justice to the memory of their departed friend Twining, and at the same time hold up his conduct as an example to future Medical gentlemen, who might arrive on this establishment, to follow his steps and emulate his virtues. If his zeal in the discharge of his duties was but the *second* point in his character, it was because his modesty was the *first* He did not, as many literary and scientific men have done, boast of "*Exegi monumentum ære perennius*," and it behoved them the more therefore not only to boast, but to glory in having had in their Society a man whose amenity of manner, could be surpassed only by his diligence in his vocation. Impressed with these truths, he, Dr. M. thought that Mr. Twining's virtues could be recorded *no where* with so much propriety and effect, as on or near the spot where he so much distinguished himself and benefitted others. Dr. Mellis therefore proposed,

That a "mural monument in brass should be engraved, descriptive of Mr. Twining's eminent good qualities, and erected in the portico of the General Hospital: and that the same (being less easily injured by motion than marble,) should, with the permission of Government, be removed, as the Society might afterwards think proper, in case, either of the Government removing their Hospital to some other place, or the Society erecting a hall of their own and wishing to have it there."

Dr. Mellis said he needed not to tell the Society, that in many parts of the world, where the characters of good and great men had been thought worthy of being handed down to posterity, the place or scene of their actions had been, when practicable and likely to be more beneficial to mankind, preferred, as sites of monuments, to churches and churchyards, which though *many* visit, *more do not*. The Doctors of the Medical profession, he rather thought, constituted a considerable part of the *latter class*. To a moveable *bust*, he had no objection; and in this country, he preferred it to *pictures*, knowing well, from experience, that the latter were more easily destroyed than the former, particularly by insects and the effects of the climate. Dr. Mellis thought that the Society were led away by a most praiseworthy but mistaken feeling in proposing to do more than was expected of them. It was known, that Mr. Twining's more immediate *friends* and *patients* were resolved to shew their gratitude for the services he had done them, and he doubted not but a monument over his grave and a tablet in the Cathedral, if not a piece of plate to his *family*, would be voted by them. This was all as it should be; and he hoped he would be pardoned when he said that he conceived their poor Society and its not *over-rich* members, who might chuse to subscribe, would not be deemed forgetful of the memory of the deceased, when they contribute to a *bust, or picture*, or a *mural monument* of *brass* either in the General Hospital, the quarters of the Assistant Surgeons, or the hall of the Medical Society, wherever it might be fixed.

After some desultory conversation on the amendment it was put and negatived.

Mr. Corbyn said that he could not allow this opportunity to pass without expressing his sentiments. It had unfortunately happened, on most occasions

when he had met Mr. Twining at the meetings of the Medical and Physical Society, hat he found his professional opinions opposed to those of that lamented individual ; but he could say from his heart that it was only professional opinion : he had always entertained the highest respect for that love of Science which was so remarkable a trait in Mr. Twining's character. Mr. Corbyn could never forget the eagerness and delight with which he was accustomed to come forward night after night when he had to announce the successful result of some new experiment and the triumph of medicine in unfolding to the society the successful practice of his brethren in various parts of India. When he considered Mr. Twining's laborious public duties and extensive private practice his astonishment had been repeatedly excited how he could possibly manage to be present at every meeting. The accomplishment of that object could have been secured only at the greatest sacrifices of convenience and rest. Mr. Corbyn knew full well from his own vocations how many difficulties and obstacles came in his way to prevent his attendance on every occasion of the regular meetings. What then must have been the nature of those which Mr. Twining had to overcome to be present in promoting the cause of science. Taking this view of Mr. Twining's public character and of his honorable and zealous discharge of his duty as Secretary to this Society, he Mr. Corbyn thought the members of it could not do too much in raising a lasting memorial for these services. Mr. Corbyn fully concurred in the opinion of Mr. Hutchinson that the Medical and Physical Society redounded greatly to the honor of the Medical profession in India. By means of the Society's transactions the talents of its members had now been developed in every part of the world. But its stability and success mainly depended upon the extraordinary zeal, energy, and devotion of its first Secretary, John Adam, and afterward upon a similar spirit which was displayed by his successor Mr. Twining.

Mr. Corbyn fully concurred in Mr. Garden's proposition for a portrait; it gave the expression of intelligence as it was depicted by the eye, which never could be represented in a bust. They had the features of Dr. John Adam faithfully represented as well as Mr. Wilson's, why should they not have also those of Mr. Twining in that room in which they had so often seen him. There existed no difficulty in obtaining the likeness, a cast had been preserved, and Mr. Swaine, the artist who had so successfully painted the portrait of Sir Charles Metcalfe, could take Mr. Twining's from the recollection he possessed of his features. *

Mr. Chapman now rose and proposed,—

"That the following gentlemen be requested to form a Committee for the purpose of carrying into effect the foregoing resolutions, viz. Messrs. Langstaff, Garden, Strong, Hutchinson, Thacker, Egerton, Bramley, and Goodeve."

This resolution was seconded by Dr. Spens, who observed that a miniature likeness of Mr. Twining was in the possession of Mrs. Twining. The resolution was put and carried unanimously. It was then proposed by Mr. Bramley that Mr. Hutchinson be appointed Secretary to the above Committee, on which the meeting broke up.

SELECTIONS.

Present arrangement of the Medical Profession in the Austrian States.

(Continued from page 376 of our last.)

ORGANIZATION OF THE PROFESSION.

We have now to give an account of the arrangements of the medical profession throughout the States. *The supreme direction of every thing that relates to the general organization of medical affairs, is committed to the Chancellory of the court of Austria.* In the provinces, it is entrusted to the provincial officers *(Landesstellen)*, who, however, are obliged to have recourse to the Chancellory in all matters of import-

* We had not seen at the time of the meeting the likeness so ably drawn by Mr. Grant.—*Ed.*

ance. As all kinds of quarantine regulations, and the appointment of *cordons sanitaires*, rest with the Minister of War, the provincial magistracy have chiefly to attend to the epidemics which may visit their districts. They are enjoined to take all necessary measures to stifle epidemics at their birth, or at least to prevent their spread.

In every province of the hereditary states of Austria there is a medical man, charged with the supreme direction of sanitary arrangements. This is the *Landschafts-Proto-Medicus*, who is also a member of the council of state (*Sanitatsrath*), with a deliberative voice in the provincial assemblies.

The director of medical studies in the University of Vienna is also the *Proto-Medicus* of the empire. His circle of activity is therefore, as may be conceived, extremely wide, for it comprehends the whole sanitary organization throughout every part of Austrian monarchy. This officer is second only to the Chancellor, with whom he maintains close relations,—the latter demanding his advice on all arrangements connected with the public health.

Every provincial government has a medical reporter attached to it, whose duty it is attend at the meetings of the magistracy, to vote on all questions as one of that body, and to assist in the periodical statements required at head quarters, touching—1, the health of the local population and of their domestic animals; 2, the hospitals, their management, and the treatment therein adopted; 3, the apothecaries' shops; and 4, the conduct of the medical men who are in the service of government.

The provincial magistrates have the charge of the public health in their respective localities, and to them the district medical officers direct their reports on all such subjects; for example, as the rise and progress of epidemics, &c. On every occasion of adopting any new sanitory arrangement, they are obliged to take the opinions of the medical faculty of the province.

Among the other functions belonging to the *Proto-Medici* are—1, that of having an eye upon the different orders of practitioners, such as the oculists, dentists, apothecaries, and midwives throughout the province; and, 2, that of superintending the hospitals, asylums, and prisons. Their qualifications for the post must comprehend an exact knowledge of the nature of the country, its inhabitants, and their habits of life—all with reference to the public health. He must offer suggestions to the government from time to time relative to the means of removing or destroying injurious influences; and his special duties embrace the noticing of every thing connected with ill-judged sites for building, the presence of marshes, bad water, the popular prejudices respecting the physical education of children, &c. *He must also see that there is a sufficient supply of clever medical practitioners in each district, and that they be not too far asunder. Quacks, and charlatan practitioners of every sort, male and female, who have not duly qualified themselves by passing the proper ordeals, he is authorised to put down; and he must take care that nobody sells drugs except the regular apothecary, and that the latter offer for sale no emmenagogues, violent medicines, or poisons, unless when applied for through the recipe of a regular physician or surgeon.* He has also to inspect the foundling and maternity hospitals.

On the occurrence of an epidemic, he must repair to the place, and take measures with the district practitioners for its subdual; and when it is over, he must draw up a full report of the circumstances of its rise, progress, nature, symptoms, &c. with such pathological and therapeutical observations as seem to be called for. The *pharmaciens*, and their establishments, are under his strict surveillance; with the injunction, that on the proper discharge of this duty, depends the safety of the subject from the pernicious consequences of bad drugs. When obliged to travel in the performance of his functions, he is paid his expenses and an indemnity. At the end of every year he is bound to send in a report to the government of the province, stating the general sanitory history of the annual period just elapsed: to this he adds a list of the births, marriages, and deaths, and of the numbers received into the hospitals, asylums, &c. with returns of the number cured, or who have died. He appends likewise an account of the atmospheric constitution of the year, and of all the phenomena which seem to affect the health of man and domestic animals: besides all the remarkable cases which have connexion with the province of medicine and surgery. All this is founded on the reports of the subordinate medical officers who have charge of the several districts.

The *Proto-Medicus* of Lower Austria has a most extensive range of duties. Among others, he visits once a month, and without previous notice, all the hospitals within his jurisdiction, including the lunatic asylum, &c.; and the results of his examination are transmitted to government. At the end of every year, he appends to his report a list of all the practitioners within his district,

with their names, appointments, and the universities where they studied.

It is a repeated injunction in the ordinances, never to give the appointment of a physician to any one who has not served many years in a large hospital. Recently a law to that effect has been made; and in order to ensure its observance, it is customary, on the occurrence of a vacancy, to advertise it in the Vienna Gazette for several days previous to the final nomination by the court.

It is a strong recommendation to a candidate, that he shall have contributed articles to the "Medical Annals of Austria:" the titles of these articles must be set forth, and if they relate to epidemic or endemic diseases, to remarkable cases in pathology, to medical topography—or contain suggestions for the preservation or amelioration of the public health—they are the more favourably looked upon. The careful and successful practice of vaccination, *gratis*, on a great number of poor children, is also a passport to preferment.*

St. Bartholomew's Hospital.

Fungus Hæmatodes of the Right Breast—Operation.

On Saturday, November 29th, at half-past 12, a female was led into the operating theatre, and placed on the table, upon whose breast, on the removal of the handkerchief from her neck, a large tumour, of the size of an ordinary human head, presented itself, occupying the situation of the right mamma, it was of a bluish colour, from enlargement of the subcutaneous vessels, and the skin was tense and shining. Judging from the countenance of the patient, the disease appeared to have made but slight inroads on her constitution. Mr. Vincent performed the operation for its removal. Commencing by an incision surrounding the inferior half of the base of the tumour, he detached it from the subjacent pectoral muscle and cellular connexions, and then, by a similar process, separated the diseased mass from the healthy parts by a semicircular division of the integuments forming the superior half of the base of the tumour. The surface, denuded of its natural investments by this operation, was at least six inches in diameter. Several small arteries were tied, and the wound was contracted by means of strapping, over which was placed a pledget of simple cerate on lint, and a roller.

On the removal of the patient, Mr. Stanley, who assisted at the operation, brought the diseased mass forwards, and addressed the pupils to the following effect:—"Previous to the explanation of the morbid appearances of the tumour which I now present to you, it is necessary for me to furnish some history of the early stages of the disorder. According to the woman's statement this growth was first perceived eighteen months since, when only a small hard lump presented itself, unaccompanied by pain. This grew but slowly during the first two months, without occasioning any uneasiness, but during the last six months it had gained ground very rapidly, and pain sometimes of a lancinating nature, had marked its progress up to its arrival at its present size. These latter symptoms had increased rapidly during the last six weeks. From the appearance of the tumour before the operation it was the opinion not only of Mr. Vincent, but also of several other medical gentlemen, that the disease was of the malignant species, and they had arrived at this conclusion from the circumstances of the swelling presenting an irregular surface to the touch, being in some parts hard and unyielding, and in others soft, and easily succumbing to the pressure of the fingers. There was, moreover, a dark appearance of the surface, owing to the enlargement of the cuticular and subcutaneous vessels, but principally of the veins, and this symptom, which even now is apparent, and was much more so before the removal of the tumour, was generally considered to be indicative that the disease which produced it was of the malignant character. Under these circumstances it was thought advisable to remove the mass, and the following is the result of its examination:—We first made a horizontal section dividing it into two equal parts, which I now exhibit to you. You perceive it is of a yellowish appearance, and of a firm texture, and the only thing to which I can at the moment compare it is a piece of udder. Now this certainly did not at first sight indicate any malignancy, and a question arose as to how far it might or might not have degenerated into that state. This, however, was soon decided by a perpendicular section of the right half of the tumour, when these dark soft masses showed themselves, and presented to the touch that brain-like substance, which is so characteristic of real fungoid growth. It is curious to observe how innocent in character apparently are the surrounding parts, while so formidable a disease exists in these detached cysts. This arrangement must have caused that irrgular sensation to the touch, which was so evident before the removal of the breast. The inference which I draw from the general aspect of the tumour is this,—that it was true fungus hæmadotes of the malignant kind, and it therefore is to be dreaded

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* Med. Gazette, as translated from a Belgian Journal.

that the disease, although temporarily arrested by the means just adopted, will at some future and not very distant time make its appearance again, perhaps in a different situation."

A portion was then cut off and presented to Mr. KIERNAN, one of the ablest pathological and anatomical investigators of the day, who attended during the operation and the examination of the tumour. We understand from the patient that she began to menstruate at the age of eighteen, and married at about twenty. At twenty-eight her catamenial discharge ceased, and at this period the disease was first perceived. Her husband has been dead some years.

HOTEL DIEU.

M. Robert's Removal of the Upper Jawbone.

The patient (whose case we recently gave) from whom M. Robert removed the whole of the superior maxillary bone with the new saw *á molette* died last week at this hospital. The wound had perfectly healed without any accident, and the cicatrix on the face presented a most favourable aspect, being almost linear and quite even, when the man was seized with symptoms of trismus, the nervous system became extensively deranged, and in two or three days he died apparently tetanic. After death the greater part of the cavities was healthy; the superior surface of the brain presented a considerable fulness in the arterial system, while the veins were comparatively empty; the arachnoid was opaque in several places, but there were no very evident traces of inflammation, no effusion under membranes, or into the ventricles. The skin covering the front of the face being turned up, and the inferior maxillary bone sawed through near its angles, we had an opportunity of examining the interior of the wound. The greater part of the wound seemed to be cicatrized, and there were no where traces of inflammation; the eyeball was free from disease, and well supported in situ by the subjacent cellular substance; there was slight redness and injection at the upper and back part of the wound; but behind and below, the remnant of the cancerous disease could be distinctly seen and felt. The whole of the right pterygoid process was enveloped with a hard cancerous mass, which extended downwards along the ramus of the lower maxillary bone.

EPILEPSY.

Mr. L. Healey, of Bewdley, in Worcestershire, has forwarded to us, in a letter dated November. 13, the particulars of a severe case of epilepsy, of twelve years' duration, which he treated successfully with the following remedies, after th abandonment of the case as hopeless by several medical gentlemen whom the patient, "T. T., a barrister, aged 30," had consulted:—"Vegetable diet; freedom of the head from hair; lotions frequently applied to the head; small quantities of blood taken from the head once a week; emetics once a week, fortnight, or month, as need be, followed by a strong purgative administered the next day; alterative medicine, according to the very ingenious and scientific plan of Dr. W. Philip, consisting of blue pill, &c., in small doses, with an issue or issues in the loins, large, and cut in deep, according to the circumstance of the case and nature of the patient, &c., corresponding to the transverse processes of the third lumbar vertebra,—all this followed up for twelve or eighteen months from the last fit, and left off very gradually in every respect." This plan, which we have transcribed in Mr. Healey's own language, has, he assures us, been succesful in many other cases treated by himself, and in three which have been treated by medical geutlemen to whom he advised its employment.

The following paper on the operative processes applicable to deformities of the nose will no doubt be interesting to our readers. We may mention by the way, that having been a pupil of Carpue's, we at an early period of our professional career performed the operation twice: in the first instance we were assisted by our worthy and talented friend Dr. Guthrie. We dissected our flap on that occasion from the cheek; in the second from the forehead. The first case was not successful as it would have been, had we made greater allowances for the great contraction of the skin which took place two or three days after the operation.

LABAT ON RHINOPLASTY.

The operative processes applicable to deformities of the nose have been much improved by own countryman Carpue, but since he wrote, Graaff and Dieffenbach in Germany, and Delpech in France, have made so many useful innovations that the art may be said to be almost entirely a new one. The methods of the surgeons whom we have just mentioned are either described in works not very accessible to the general reader, or are known only to a few who may have followed their practice; it will, therefore, be interesting and instructive to collect a brief account of the art as it at present exists, and endeavour to determine what peculiar process is best fitted for the different defor-

mities of the nose which may present themselves to our notice.

The nature and degree of the injury from which the nose has suffered, vary infinitely in different cases; hence we may distinguish with the author, 1st, complete absence of that organ; 2nd, partial deformity arising from loss of one or both lobes at the same time; destruction of a lateral paries, of the dorsum, or of the inferior division of the nostril: these accidents may require each a different operation, which we shall proceed to describe after having briefly noticed the most important general principles which should guide the operator under all circumstances.

The first care of the surgeon should be to ascertain whether the deformity be accidental or arising from disease (as scrofula, lues, &c.); and, in the latter case, to eradicate the constitutional malady before he attempts any rhinoplastic operation.

When the method to be employed has been decided upon, the surgeon should commence by modelling in wax the form of the nose or portion of the nose to be restored; and this done, the wax model must be flattened, and its outline carefully drawn on a piece of paper, which will afterwards serve to measure the extent and shape of the flap. The outline of the flap is best traced with a pencil moistened in a solution of nitrate of silver; by this means the line is not defaced by the hemorrhage, moisture of the fingers, &c.

Whenever the circumstance of the nasal deformity is very irregular, the edges should be equalized by convenient incisions, and the flap should always be dissected from below upwards, lest its outline should be concealed by the blood.

As the skin continues to contract during the first few days which succeed the operation, the artificial nose should always be a little larger than the natural one may be supposed to have been.

In general the edges of the wound resulting from the dissection of the flap should be brought together only with a moderate degree of force, lest the inflammation, which inevitably ensues, may be augmented beyond measure.

The rules to be observed after the operation are easily deduced from the general principles of surgery. An excess of inflammation must be guarded against by the assiduous employment of every means in our power; as a general rule it may be laid down, that the dressings should remain on until the third day, but as soon as ever cicatrization commences, the surgeon must examine frequently the state of the parts, in order to obviate the deviations to which the new nose is constantly liable.

The ancient history of rhinoplasty may be comprised in a very few words. The operation was known and practised at a very early period of surgery in India by the Brachmans, the Brahmins, and their successors the Koomans. Galen recommends "the surgeon, when a wound or ulcer shall have destroyed the whole or part of the nose, to make a new one at the expense of the integuments of the face." Celsus advises longitudinal incisions like those of M. Dieffenbach, to facilitate the eversion of the flap towards the median line. From India the Sicilian surgeons in all probability received their ideas on the art of restoring noses, and the earliest record we possess on this subject is the report of a Neapolitan Bishop, in 1442, on an operation of rhinoplasty, performed by Branca.

In 1517, Taglicozzi, professor at Bologne, published his work on rhinoplasty, and since that time the operation has been very generally called after his name. The Taglicotian, or Italian method (since revived by M. Graaff and called German), is practised in the following manner:—

The operator, having made a model of the nose in wax or paper, traced its outline on the patient's arm, which was brought up and supported in front of the nasal cavity; the summit of the model regarded the shoulder, and the flap was dissected up from the point to the base; the edges of the injured nose were now pared; and the flap was laid down, and united by various points of suture. The flap received nourishment from its base, which was left adherent to the arm; the fore-arm was supported on a level with the nose for at least twelve days, until the edges of the flap were sufficiently united; at the expiration of that time the base of the flap was divided, and pierced with two orifices to resemble the nares; these were kept open with a bit of lead or lint, and the surgeon endeavoured to give his nose the best shape possible.

Graaff and Delpech are the only moderns who have employed the Taglicotian method, which they have improved by rendering the support and adjustment of the arm more easy, through an apparatus invented for the purpose. In 1814, Graaff operated after this method on a Prussian soldier who had lost his nose by the stroke of a sabre; and in 1817, on an individual who had the lower third of the organ completely destroyed by a phagedemic ulcer; in the latter case the sutures were removed on the fourth day, and the base of the flap was divided on the 6th; on the 26th day he commenced to give the nose its shape; the nasal openings, which had been practised at an early period, were now enlarged, shaped, and

kept open by two small tubes of zinc, and in forty days the cure was complete.

The more ancient, and, at the present day, more universally, employed operation, is that commonly known by the name of "Indian" or "Kooman." The honour of having introduced this method into notice amongst the Europeans, is due to our countryman Lucas, since which it has been employed successfully by Lynx, Carpue, Hutchison, Travers, Liston, and several other surgeons. The principle of the "Indian" method is essentially the same as that of the "Italian;" the only difference is that the flap in the former method is taken from the skin of the forehead. It is the one most applicable to all cases where the nose has been completely lost. We cannot give a better idea of it than by analyzing a case in which the Indian method was successfully practised by M. Labat:—

The patient, a French soldier, received a violent sabre cut, during the war in Spain, which completely destroyed the whole of the nose, and a part of the upper lip. The wound soon healed, but the aspect of the patient was so hideous, that he could no longer find employment of any kind, and the brave soldier, discharged from the army, was compelled to beg a scanty subsistence from door to door. He remained in this miserable state for four years, when Dr. Labet, who accidentally met him at Aix, proposed an operation. It was instantly accepted, and performed in the following manner:—

All the preparations, such as the wax-model &c., having been made the evening before, the operator traced the outline of his proper model on the patient's forehead. This model, when traced, exhibited the appearance of an isosceles triangle reversed; the sides thirty-two lines long, the base twenty-eight lines, having in its middle a rectangular appendix of an inch by half-an-inch broad; the latter was destined to supply the inferior part of the division of the nostrils. The two superior angles of the flap were gently rounded off. The second "time" of operation consisted in the dissection of the flap, which was made from below upwards, and turned down, leaving about four lines undetached between the eye-brows. As the torsion of the flap was difficult, the incision prolonged down on the left side four lines, by which means the pedicle was more easily reversed, and less liable to strangulation. The hemorrhage was slight, and required no application of ligatures or torsion of the artery.

The flap was now twisted from right to left, and turned down upon the cavity which the nasal fossæ presented; the edges of the old wound were immediately pared, and the edges of the flap fitted in, and fixed on either side by four points of the interrupted suture. The rectangular appendix was now pared obliquely on its epidermic surface, near the extremity, and planted by two points of suture on the centre of the upper lip. In order to render this part of the operation more easy, the frenum and mucous membrane of the upper lip were divided; finally, the operation was terminated by introducing a cylindrical plug of lint into each nostril.

But in order to remedy the extent of the cicatrix which would have remained on the forehead, the operator converted the triangular wound into an elliptical one, by rounding off the two superior angles; by this means the cicatrix in the forehead was rendered almost linear. Such is a brief description of the Indian method in its most improved form, applied to the restoration of a nose totally destroyed. The subsequent treatment does not require any peculiar notice. On the 16th day after the operation, M. Labat, on examining the pedicle, which he proposed to divide, found that this manœuvre was unnecessary. He parted a small portion of its edges, exercised gentle compression, and had the good fortune to obtain complete adhesion.

The most remarkable point in the operation just noticed, is the improvement first introduced by M. Lisfranc, of prolonging the incision several lines lower at one side than the other, and thus avoiding too great torsion of the pedicle. However, it would appear, that a similar principle was put in execution several years before by M. Lallemand of Montpelier, in a case of restoration of the lower lip with a flap taken from the neck. Small portions of charpie, succeeded by the use of bits of a gum-elastic sound, are all that are required to keep the inferior aperture of the nares open.

M. Blandin has slightly modified the operation by dividing it into two times. He turns down the flap in the usual manner, and twenty or thirty days later endeavours to agglutinate the pedicle of the flap to the proper bones of the nose, after having first removed the skin by which these latter are covered.

We have now briefly noticed the "Italian" and "Indian" methods, as applicable to complete destruction of the nose; let us consider those to which the surgeon may have recourse in cases where the organ has suffered in a minor degree.

When the lobe of the nose has been destroyed by ulceration or accident, several rhinoplastic processes may be employed, according to circumstances. Most surgeons take a V flap from the forehead, and turn it down, thus supplying the tip of the nose

absolutely in the same manner as if the whole organ had been lost. When this operation is performed, M. Labat judiciously recommends denuding the cutaneous tissue which covers the proper bones of the nose, in order to establish a more intimate union between this skin and the inner face of the flap. Dieffenbach of Berlin, who since Tagliacozzi is, perhaps, the greatest restorer of noses that ever lived, has modified this operation, and proposes to take the flap from the scalp, in order to avoid the cicatrix in the forehead; and, instead of the sutures commonly used, he employs a quantity of very small needles with the twisted suture. Indeed, in some cases, he has gone so far as to introduce thirty-two of these, in order to obtain a more complete contact. Vide Lancet, present vol, page 81.

In some cases, M. Dieffenbach proposes, instead of taking the flap from the head, to remove the edges of the old nose, and to bring them as close to the median line as possible, after having practised lateral incisons, to favour this approximation.

Finally, the author proposes to take two elliptical flaps, one from each cheek, to form the wings of the nose, and to supply the septum below by a flap from the upper lip.

This latter method has been crowned with complete success in practice; the cicatrix on each cheek becomes almost linear while that on the lip barely discoverable by the eye. Dupuytren has operated upon two patients, by Dieffenbach's process, and if we are to believe the portraits which are given at the end of the volume before us, the new noses thus made were just as good as the old ones.

When the nasal deformity comprehends only the superior or dorsal ridge of the nose (a case comparatively rare), it may consist either in a congenital or an accidental fissure of the parietes, in a congenital or less marked depression of the bridge nose.

In the first case, the operation called rhinoraphé is applicable; the edges are to be pared and brought together by the twisted suture, as in cases of hare-lip, and this operation generally succeeds, especially when the fissure has been occasioned by a cutting instrument, as the blade of a sabre. M. Labat details several cases of this latter kind, cured by Larrey and others.

When the dorsum of the nose has been destroyed, it is a point of much practical importance for the surgeon to consider whether or not the loss of substance may not be repaired by simple rhinoraphé; again, he should be careful to examine whether the anterior edge of the septum be sufficiently prominent or not to serve as a support to the flap. Should enough of the septum remain, its edge is to be pared, and the flap united along it; in the contrary case, this union must be avoided, to prevent an ugly depression of the nose. With these precautions the flap is taken from the forehead, and laid down on the dorsum of the nose in the manner already described.

Complete depression, or, rather, burying of the dorsum of the nose in the nasal fossæ, is a most disgusting deformity, though less hideous than those which we have just noticed, and it is to Dieffenbach again that we owe the operative methods applicable to this accident.

It consists, says Dieffenbach, in excising the middle of the dorsum of the nose, like a pyramid, by two transverse incisions, which meet at an acute angle near the skin of the cheek; or the depressed dorsum is preserved, and an oval flap is taken away from the lateral parietes of the organ, and from its cartilaginous septum; one of the ends of this flap regards the dorsum of the nose, the other is turned downward towards the skin of the cheek. The septum, after these incisions, is united by points of simple suture, and the lateral parietes by the twisted; the effect of the new cicatrix is to throw up the dorsum of the nose, which was before completely depressed.

CLINICAL OBSERVATIONS ON VARIOUS DISEASES, BY MR. WARDROP.

Affections of the voluntary muscles treated by purgatives.

The various phenomena accompanying diseases of the nervous system do not appear to have as yet been so satisfactorily explained as those of some of the other systems in the economy. What can be more striking than the differences produced in the functions of the voluntary muscles in these diseases? and yet how inexplicable are they! Why is it that in one disease the muscles lose their power altogether,—in another experience unceasing involuntary motions,—in a third suffer spasmodic actions or cramps,—in a fourth labour under a state of permanent contraction or trismus?

Two of these affections of the muscles, and the treatment employed for their relief, are exemplified in the following cases;—

Case.—*Loss of Voluntary Motion successfully treated by Purgatives.*—A robust-looking man, about thirty-five years of age, suddenly felt, while walking in the street,

a numbness in the calf of the left leg, which gradually extended up the limb. In the evening of the same day he had a similar sensation of numbness with loss of power in the left hand and arm. In a few days the same symptoms attacked the right leg and thigh, and the right hand, and in ten days from the first symptoms making their appearance, he completely lost the power of locomotion, and possessed no voluntary power but that of turning his head from side to side, and of moving his toes. The skin remained quite sensible to the touch, the functions of the primæ viæ and urinary organs continued natural, and he had neither headach nor giddiness. By the advice of a physician he was profusely bled and purged, went through a course of mercury, and had blisters applied to the loins, but without deriving the smallest benefit from these remedies.

When I was consulted, which was nearly four months from the beginning of his illness, he was very nearly in the same state as at the commencement of the disease. I found him lying on his back, and he could not without a great effort move even in a slight degree either the upper or the lower extremities, but he could readily move his head and toes. The functions of the organs of sense were entire. He had no difficulty in voiding water; his appetite was good, and he had a daily alvine discharge. His pulse was natural, he had no febrile symptoms, and he was not much reduced in flesh. He stated, however, that for some time previous to this illness, the abdomen had gradually become full and tense, and several days previous to the attack he complained of diarrhœa, at which period he had travelled on the outside of a coach and caught cold.

I recommended to this patient a course of purgatives, giving him colocynth pill, in conjunction with half a grain of calomel, morning and evening. This pill, with little change, was continued for some time, producing copious evacuations daily, and in about three weeks a decided amendment had commenced. This was remarked by motion being first restored to the fingers, then to the arm, and next to the lower limbs, and every succeeding week there was a distinct amelioration of his condition so that at the end of four months, during which time the same purgative system was continued, the dose being varied according to the effects produced, he was enabled to walk about without assistance, and to write. From this period he continued perfectly well, and I saw him several years afterwards in the enjoyment of good health, having never had any return of the symptoms.

Case.—*Chorea successfully treated by purgatives.*—A striking feature in the treatment of the subsequent case of chorea, or St. Vitus's dance, is the benefit which was derived from a long-continued course of purgatives,—a course which was not interrupted by any untoward circumstance, and from no change in the therapeutic means being required during the whole progress of the cure.

I was consulted in the case of a young lady who was suffering from chorea, with which she had been afflicted about twenty months, and during which time she had been under the care of several eminent practitioners in Paris, as well as in this country. A great variety of different remedies had in vain been tried, and I found her in a most deplorable condition, for besides the constant involuntary motions of her face, head, and limbs, her intellectual powers were much impaired, she had become greatly emaciated, and her skin was covered with an herpetic eruption.

The only system of treatment which appeared to me at all likely to improve her condition, and which had not been tried, was a course of purgatives, conducted on the principles so ably pointed out by Dr. Hamilton, though at this time she had none of the more usual symptoms of deranged bowels.

I ordered two aloetic pills, to be taken three times a day, and the person applied to to make up the prescription was so astonished at the dose, that he deemed it proper to warn the parents of the young lady that her bowels were so irritable that on several occasions only three grains of aloes had been ordered by Dr. Warren, who then attended her, the effect being such that he reduced it to two and then to one grain; that being found to act sufficiently. This circumstance, however, did not dissuade the parents from adhering strictly to the advice which had been given, and accordingly, when I saw her two days after, I found that the large dose of aloes had not caused irritation, but had produced only a few copious evacuations. She continued to take the same quantity of the aloes daily for a fortnight, which generally produced not more than four, nor less than three evacuations in each twenty-four hours. The evacuations were more or less copious, of unnatural quality, and usually consistent, and seldom was there any tenesmus or irritation. All the symptoms of the disease at the same time diminished in severity, and her general appearance was improved.

She now began to diminish the number of the aloetic pills, and during the succeeding fortnight took two only twice a day. Though the evacuations still continued unnatural, both in quantity and qua-

lity, they became less copious and more healthy in appearance, and all the symptoms of her disorder continued to be subdued. On these accounts the dose of the aloes was diminished, and during the next fortnight she took only two aloetic pills every morning, after which period the course of purgatives was terminated.

With the exception of an aloetic pill occasionally, and some cascarilla infusion with soda, she took no other medicines, and her health was perfectly restored. Many years have since elapsed, but she has never had any return of chorea, and has become the mother of a family.

There are several important pathological, as well as practical, points illustrated by the two preceding cases. In both, the affection of the involuntary muscles had unquestionably been symptomatic of a derangement in the alimentary canal, as was proved by the effect of the treatment which was employed.

The extraordinary difference in the character of the symptoms in the two cases is worthy of notice. In the first, the patient had lost the power of many of the voluntary muscles, whilst, in the second, the same class of muscles, though they continued to act under the influence of the will, were also affected with almost constant involuntary movements, affording a proof of the curious fact, that the power of the nerves to excite muscular action may either be morbidly diminished or morbidly increased. It remains, indeed, an interesting subject of research, to discover what are the changes in the functions of the chylopoietic viscera, and the corresponding alterations in the functions of particular nerves which those chylopoietic derangements produce.

In a practical view also the foregoing cases are important, because they afford an excellent illustration of the use of purgatives in a class of diseases which are still frequently considered and treated in a very different manner. They also show the difference in the evacuating effects, and the mild action, of certain purgative medicines given in large quantities in cases where small doses irritate the bowels,—an observation which has been so ably pointed out by Dr. Hamilton in his valuable work.

Sir B. Brodie's Clinic.

One very great advantage which the pupils of St. George's derive, is from the excellent method of clinical instruction pursued by Sir B. Brodie, who never goes round the hospital or visits any interesting case, without offering some valuable observations upon it, replete at once with the greatest practical interest both to the student and the junior practitioner. We subjoin some of these, and shall take especial note, for the benefit of our readers, of any future clinical observations which Sir Benjamin Brodie may make.

Affections of the Knee-Joint.

"A case of inflammation of the synovial membrane of the knee-joint may occur, and may terminate in the formation of abscess; but such abscess may heal, and the patient may ultimately recover with an anchylosed joint, which, after all, is a thing to be desired and hoped for in such cases. Whenever the affection commences in the synovial membrane, even if it goes on to destruction of the cartilages of the bones, I always have hopes of the patient recovering. The great thing in these cases, in their treatment, is to keep the limb in the most perfect state of immobility. I have seen three cases of this affection recently in private practice; one lady had abscess of the knee-joint arising from inflammation of the synovial membrane, and she came up all the way from Norfolk; she was under my care for two months, during which time she kept her limb in the most perfect state of rest, and she recovered. These cases sometimes take a long time to cure, as matter will sometimes burrow among the muscles and tendons for some time after original abscess has healed. The great mistake which I believe arises in these cases, is from the circumstance of surgeons confounding these cases which commence in the synovial membrane with those which commence in scrofulous diseases of the bones themselves; in these latter cases there is no chance where they occur in adult age, and but very little where they occur in youth. It has been said, and very wrongly said, that you should make but a very small opening into a joint when there is matter in it; but the fact is, that the joint is no longer a joint but an abscess, and should therefore be freely laid open, to allow of the matter discharging itself as fast as it forms. Sometimes the joint recovers itself in a very distorted state. I know of a case in which the tibia was half dislocated, but by care the joint was restored to its usual state. The limb, generally, is turned somewhat outwards and flexed, which, indeed, is a much better position for it than if it were quite straight, especially in sitting down; but if the patient requires it, the limb can be made straighter by using that instrument which the boy wears in the other ward."

Affection of the Knee-Joint.

There is a man in one of the upper wards at present, under the care of Sir B. Brodie

with an enormous swelling of the synovial membrane of the right knee-joint: we do not exaggerate when we say that it is as large as a child's head. The patient was in the hospital some time since, and it was done up, according to Sir B. Brodie's plan, with plaster and bandages, leather splints, and rest, and the knee somewhat diminished from its large size. The air of the hospital not agreeing with him, however, he went out, and, from not taking proper care of himself, the knee-joint soon became as large as ever; he was again admitted, and has been in the hospital now for some weeks. Sir B. Brodie put him under Mr. Scott's plan of treatment, with mercurial ointment and alternate compresses and bandages, in which the knee was done up, and kept perfectly at rest for some weeks, and upon being undone today (Nov. 22), the large size of the joint was found to be diminished, and the same plan of treatment was ordered to be persevered in. Sir B. Brodie remarked, "that the case was one of unusual increase in quantity of the synovial fluid of the joint; he did not feel himself authorised to amputate the limb in such cases, as he thought that by some means or other they ought to be cured." A student having asked whether it would be advisable and what would be the result of puncturing such a joint to let out some of the synovia, Sir B. Brodie answered, "that he did not in his present experience believe that either good or harm would result from it, but he could easily believe that eventually harm might result frsm such a practice being persevered in."

Compound Fractures.

"In the treatment of these cases, a great deal depends on the delicate handling of the parts by the surgeon, as I have seen several cases, where this has not been attended to, not do so well."

Effects of Arsenic.

"Whenever arsenic excites pain or tormina in the bowels, it should be of course discontinued. I know a lady, in whom it generally causes a puffy œdema of the face whenever it is taken, but no other part of her body is affected by it."

Morbid Affection of the Cellular Membrane —Erysipelas.

"I have formerly spoken to you of the œdema and serous infiltration of the cellular membrane which we see take place in certain cases. The serum, in these cases, appears to poison the cellular membrane, and produce the death of the part, which sloughs and comes away. The discharge stains the bandages; and I sent some of it to Dr. Prout who detected Prussian blue in it. The remedy, in these cases, is to puncture the part every day if necessary, and to let out the effused serum as fast as it forms, and to let it collect." These remarks were made with reference to a man's case who has a fracture of the humerus extending, we believe, into the elbow-joint. He has had an attack of erysipelas, which was not preceded by or accompanied with shivering; with reference to which Sir Benj. Brodie remarked, "that such erysipelas was generally a diagnostic of some severe *internal* mischief; it would occur sometimes on the scalp from effusion between the dura mater and cranium, and generally occurred a short time previous to death." Here, however, in this case, there was no such serious injury, it appeared to arise from a costive state of the bowels.

Injury of the Spine—Bloodly Vesicle— Hysteria.

A man was admitted, a few days ago, having received a severe fall, and lost all power over the lower extremities. A vesicle, filled with dark coloured serum, has appeared on the upper surface of the dorsum of the right foot. The temperature of each was higher than natural. Sir B. Brodie remarked, "that he had never met with a similar case; he had seen something similar occur in women of a low hysterical temperament, where there was an extreme degree of nervous excitability."

Bursæ.

To a remark made by the house-surgeon, that several cases of enlarged bursæ had, within the twelve months, died, notwithstanding the most active treatment, and wishing to know Sir B. Brodie's opinion of such cases, Sir B. Brodie remarked, "that he believed blistering over their surface was the best plan of treatment to adopt in such cases, and at the same time added, that he was in general very loth to meddle with them where they were situated under muscular structures, except absolutely obliged. The plan which I have found most successful in such cases, and which I have never known to fail," continued Sir Benjamin, "is that of simply keeping the arm bound to the side and puncturing the bursal tumour, and letting the fluid out; this plan more particularly refers to affection of those bursæ situated under the deltoid muscle, or between the sub-scapular muscles and latissimus dorsi. The worst of these cases is, that, you do not know where they come from, and that, when you find them in these latter situations, they most frequently are found to descend from the shoulder-joint. Sometimes they will bear dissecting out; at other times such an operation is followed by very bad symptoms. In removing or operating in any way upon parts which are situated under muscles, a great deal depends upon the manner in which you divide the muscle; if, for instance, you open a bursa

under a muscle, and divide that muscle in the course of its fibres, the very action of the muscle afterwards will draw the fibres together, and there will be no free exit for the contents of the bursa to escape; but, if on the contrary, you cut the muscle across its fibres, they do not contract together, and allow free passage for the discharge, and the muscle in time unites again as well as ever. In cases of exostosis of bone under muscles, I have known a very simple case very nearly terminate fatally from matter forming and burrowing under the muscles. I knew of a case in Mr. Keate's practice of this nature, and I have heard of some others."

CORRESPONDENCE.

CAN LEPROSY BE INTRODUCED WITH VACCINATION? The important question put to us by our correspondent J——, we are happy to say, may be satisfactorily answered by stating that the introduction of vaccination has been found, by extensive experience, in all countries to be, with few exceptions, a certain preventive of small pox. In the few exceptions to which we have alluded among whom small pox occurred after vaccination that virulent disease was rendered so mild as to be brought completely under the influence of remedial measures. So that vaccination, although not actually preventive of variolous infection in some constitutions, unquestionably has the power to destroy its virulent and fatal character: and further that instead of vaccination becoming the vehicle, as dreaded by our correspondent, of a more virulent constitutional affection, such as leprosy, &c. we have the experience of the most able and cautious practitioners of the age to prove that pure vaccine virus has actually the power of diminishing the violence of other diseases, that it cannot be the vehicle of any but its own infection.

To the Editor of the India Journal of Medical Science.

Sir,—To Dr. Jenner, I believe, we owe that inestimable blessing—the discovery of vaccination. When we contemplate the extensive benefit resulting to the nation at large from this simple, though efficacious method of ameliorating the virulence of that most awful of distempers to which the human constitution is prone—the small pox—we pause, and offer up the tribute of gratitude, to the memory of this philanthropist, and pray, that the diffusion of the knowledge, so happily acquired through the instrumentality of this eminent Physician, may spread far and wide, and rest our hopes in the expectation that, if it does not in time extirpate altogether this dreadful and universal scourge, it may tend, at least, to assuage its power, and reduce its influence.

Thus far, Sir, the investigation of the question before us fully justifies such an inference deducible from the success vaccination in general has hitherto attained; and the probability of its reaching the happy acme so desirable, is not at all exaggerated, when the results of its practice are universally admitted and satisfactorily proved that as yet it is the best antidote we possess for so baneful a disease.

My present purpose however in addressing you originates not in the circumstance of eulogizing the discoverer or promoting the ends to which a strict adherence in the practice would answer. Both these undertakings are praiseworthy, and to abler hands therefore I consign them; but to question that while we are in the progress of our endeavours to eradicate a formidable and destructive disease, whether we do, or do not, in the attempt to accomplish our views, transfuse, by communication, other diseases foreign to the constitution? In general, and from just and potent reasons, vaccination is extensively diffused among the native population of Calcutta—from them the virus in common is obtained for vaccinating the Christian portion. Indigenous than to this country is that gigantic and appalling disease the leprosy, by the transferring therefore the virus, though of a healthy child from a family so afflicted—do we, or do we not, communicate a constitutional disease by inoculation to another body and so on, *ad infinitum*. In my humble opinion such a circumstance is probable, and in this train of reflection I am lead to the belief that it is possible that from the adoption of vaccination a new disease foreign to the animal system to which the virus is communicated, is likely to be extended. Precautionary measures, I doubt not, are taken by those who control these departments from other and proper feelings to guard against such an evil, but in a populous country like this the conjecture may be hazarded that such a contact cannot be altogether avoided; if so, are not we, while striving in the one hand to annihilate the influence of an awful scourge, tacitly promoting the engendering of another? Should my premises in such a state of things be correct the momentous question therefore arises—How is this additional dilemma to be overcome? Being without the pale of your humane and honorable profession, vain and preposterous would

be any attempt on my part to perpetuate an opinion. I declare my incompetency at once to the task, but you, Sir, and others who are more able and worthy of such an undertaking, it is to be hoped, will take the trouble either to destroy the assumptions I have presumed to submit, or offer, if (which Heaven forbid) the inference I have drawn leave room to suspect the accuracy of my statement, such suggestions as will secure to us the incalculable blessings of vaccination divested of the horrors its general dissemination, in the way I have described, entails.

Yonrs obediently,

J.

MISCELLANEOUS INTELLIGENCE.

Floating Hospital.—We have always been of opinion that the General Hospital is not only in regard to its locality bnt especially on account of its distance from the shipping, a very unfit receptable for sick seamen; we were therefore exceedingly glad to find in that benevolent and zealous physician Dr. Stewart a determination at any cost, or sacrifice of time, to found a hospital for the reception of the sick on the banks of the Hooghly. The success of the institution is now manifested by its utility in preserving many a sailor from the jaws of death or a broken down constitution. Such is the high character this hospital has attained for comfort and convenience that it has obtained extensive support from the shipping interest, although not sufficient, we believe, to cover Dr. Stewart's outlay in establishing it. We trust however that either the Government or the Commercial community will come forward and secure its humane founder from any loss. On the same principle and with the same view of affording convenience for the reception of sick seamen two very intelligent able, and public spirited practitioners, Dr. MacGowan and Mr. Maxton, have at considerable expence moored a Floating Hospital in the centre of the river. We have been on board, and therefore can speak as to its roomy, airy, and admirable plan of accomodation. It is fore and aft 110 feet and 27 in breadth. A hospital like this has numerous advantages if the mind has any thing to do in disease; here then a sailor is as it were at home, with all the comforts which could be furnished in an efficient spacious hospital on shore. The ports of the ship are exceedingly large, out of which he can look out and see his ship, and the sailors' constant theme of discussing the trimming and cut of other ships will be to him in such a situation a source of constant amusement. Moreover access to spirits, which is so often clandestinely introduced into hospitals and retards the operation of medicine, is here effectually cut off. Besides the ward for private sailors there are excellent poop accomodations for officers, and when, as it is intended, a boarded roof (instead of as at present an awning) is built over the poop and deck, there will be secured as great a degree of coolness and protection from the rays of the sun as is now experienced in our best built houses. Dr. MacGowan and Mr. Maxton must have sunk a considerable capital in the purchasing and laying out of this Floating Hospital: we trust they will receive that public support to which they are so justly entitled.

Andrew Wood Esquire, Surgeon 5th Battalion Artillery. We are glad to observe that Mr. Wood is re-appointed to the Artillery, a gentleman who, by his many amiable and excellent qualities of heart and mind, has endeared himself to all in that branch of the service. For a high sense of duty, for zeal in its performance, and talents in his profession, Mr. Wood has been long distinguished among his brethren.

Dr. Duncan Stewart has been appointed second Assistant to the General Hospital. As the Editor of this journal we have great reason to rejoice in this appointment: the zealons and liberal support we received from Dr Stewart, on a question mooted in our last journal, is an earnest of what we may anticipate from so able an advocate of free discussion: in regard to the clinical intelligence to be furnished from his present scene of labours.

Delhi Gazette.—Our worthy contemporary of the *Delhi Gazette* has thought, that our pages, compared with former numbers,

have been deficient in original communication; but in fact they have exceeded: instead, however, of confining them to the columns headed, "Original Communications," we have placed them also under those of "Hospital Reports," "Correspondence," and "Miscellaneous Intelligence." Such is the zeal in the cause of Medical Science among our professional brethren in all parts of India that we are able now to issue two numbers monthly each consisting of the same number of pages as at present. If other circumstances permit we hope to commence on this plan from January 1836.

Our contemporary has also thought that we had reviewed celebrated authors in England: so far to the contrary however is the case that all our reviews have been of works of great interest on Tropical diseases and published in India.

EUROPEAN BUTCHERS.—If health and constitution depend greatly on the food it follows that, in attending to the rules of Hygiène, obtaining wholesome well-fed meat is of great importance: we are glad therefore to find European Butchers establishing themselves in different parts of the metropolis. Mr. Pittman was the first to shew a neat, clean, and respectable looking Butcher's shop in Cossitollah, and we believe he is succeeding in his business beyond expectation: the fact is, he goes on an excellent principle, he sells meat not only of a superior quality but remarkably cheap. We now find that another European, Mr. Pitt, has established himself in Dhurrumtollah, having a farm at Teiljullah, Entally, by which he is able to give farm-fed meat, of a superior quality to that produced at the public bazars and at a very reasonable price. We have no doubt this praiseworthy attempt among our countrymen will continue to meet with every encouragement, and that a spirit of emulation will now be excited among the Native butchers, the result of which will be, that families resident in Calcutta will no longer be dependent upon and suffer the imposition of their consummas, as books are sent round for orders, and families will be supplied, and with every regard to cleanliness, with wholesome meat of every description, as is the case in Europe Towns, and at a moment's notice.

NOTICE TO CORRESPONDENTS.

Mr. MACCOSH's paper in continuation of his Account of Assam has been received: it will appear in our next number.

The following paper will also appear in our next. STOTT on Scrotal Hernia.

Dr. CHAPMAN of Purneah has entered the arena taking up Lithotrity against Lithotomy. This paper we shall insert in our next as it came too late for the present number,

We have received "*Qui Vive*" vindicating the judicial branch of the service from Mr. HUTCHINSON's strictures on the cruelty inflicted on prisoners in Indian Jails. We will endeavour to give it a place in our next, number.

We have also received Mr. HUNTER's valuable communication on the clinical practice in the Hospital of the 2nd or Queen's Royal.

The communication from A SUBSCRIBER, containing a critical notice extracted from the *India Gazette* on the late Mr. TWINING's work on clinical illustration of the diseases of Bengal, 1st Edition, is no longer of any interest to the public: if Mr. TWINING's friends desire to have his work 2nd edition reviewed in the *Medical Journal*, we shall be happy to perform that duty on the work being presented to us for the purpose.

We are under many obligations to Dr. GOODEVE for his able sketch of the Topography of Midnapore; it shall follow the paper on the Topography of Assam.

We have received an interesting paper by Mr. EVANS on Fungus Hæmatodes, with a drawing: the latter is being lithographed. We hope to be able to insert this communication in our next number.

We have received E———'s second communication: it is of great consequence as regards the diffusion of science. We should feel exceedingly obliged to him if he would allow us to put his real name to it. Had we known he was the author of the first communication it certainly would have appeared. We offer him our best thanks for the zeal he takes in the good cause.

We had finished our review of Mr. Hutchinson's work: but our printer warned us of want of room: it must be delayed until our next number when if possible we shall give our review of Malcomson on rheumatism:

We are compelled to postpone J. L——s paper.

We have great pleasure in announcing that another celebrated and talented correspondent has rallied round the standand raised in the cause of science; we have enrolled the name of Brett, and in our next, we shall be able in a communication from him to give evidence of more of the triumphs of surgery in India.

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TRIUMPHS OF SURGERY IN INDIA.

In the following communication from Mr. Brett we have not only satisfactory evidence of the confidence the natives have in the skill of European practitioners, but a most gratifying proof of the zeal, benevolence, and talents of a British practitioner itinerating over India doing good. It is unquestionably by such stirring instances as these that the British name is exalted and the triumph of Surgery exhibited in the dreary wastes of benighted India.

Mr. Brett feelingly alludes to the want of charitable institutions in various parts of India and to his apprehension of the ruin of the one for want of support, which he has just established. But we trust the appeal to Government, which we have made in our present number, will not be in vain, that the cries of the sick and afflicted poor in India for Surgical aid will not be unheeded, and that the talents of a Brett, a Finch, a Mackinnon, a Burnard, and numerous others of our Mofussil brethren will not go unrewarded. When we point to the immense wealth of Dupuytren, Sir Astley Cooper, Sir B. Brodie, Sir Chas. Bell, and others, —the fruits of professional zeal and talents, we trust, we shall not be considered as over stepping the boundary of reason and equity in preferring claims for some encouragement for our celebrated Surgeons in India.

I have the pleasure of forwarding the accompanying communication which appears better adapted for publication in your excellently conducted journal, than in the Transactions of the Medical and Physical Society.

I have observed it discussed in your publication by others that the natives are reluctant to place confidence in European Medical men, much might be said as to the causes of this erroneous supposition. Briefly, however, that such confidence should be wanting when a Medical man secludes himself in a cantonment, of which the native population have always a degree of dread, is not surprizing, especially if combined with ignorance of their language, customs, and habits; but if once a Medical man gives his attention to these, and manifests a readiness to relieve their sufferings, they will inevitably flock to him. Witness the accompanying list* of operations which took place in the space of about ten days, merely by sending intimation, at Cawnpore, in the city, that a gentleman putting up at the Dák Bungalow was willing to attend to the sick. These operations were witnessed by the majority of the Medical men at that station, and the more serious cases were admitted into the Hospital of the Lancers. The result was truly satisfactory.

I remember, when marching through Bareilly two years ago, taking with me no less than five cases of stone, which I had met with in this manner during my march. I took them into Bareilly. I remained there with a friend many days (Colonel Anquetil) and I operated on them all in the hospital of the 13th N. I. by permission of my excellent and zealous friend Dr. Finch. I was delighted to find that this gave Dr. F.'s hospital a name; as I perceive that he has himself subsequently communicated to your journal, several of his own operations. I have no doubt that these patients going to their homes pointed out to others in their respective neighbourhoods where they might obtain relief.

A similar result has occurred at Simlah, where I was on leave last year, in cases of cataract and stone, and some minor operations, at Suharunpoor also, under my talented friends Dr. Falconer and F. Thompson, at Landour, Meerut, Saugor, and many other places.

In any populous city a charitable institution can be established in two or three months. I have established one here; but the authorities are afraid that Government will not support it, so that it must fall to the ground, I fear; for the contributions of the charitable have been expended.

* This shall be given in our next.—*Ed.*

Always making it a rule to express my readiness to attend the natives, my observations of disease have not been inconsiderable. My operations alone have been rather extensive.

The following is an extract from my memoranda.

Artificial Pupil (various kinds of operations),	19
Do. in cases blind from infancy or a very early period,	2
Cataract,	247
Do. congenital,	4
Cancer of the lip,	1
Exostosis of infr. maxy. bone,	1
Do. of a portion of the superior (extirpation),	1
Entropian,	5
Extirpation of encysted tumours,	6
Do. of Fungus Hæmatodes of the eye,	1
Do. of the thumb,	1
Fistula lachrymalis,	3
Do. (Dupuytren's Operation),	2
Hare Lip,	1
Hernia Abdominalis strangulated,	1
Lithotomy,	61
Necrosis of Femur,	1
Do. Tibia,	1
Do. Radius	2
Ptyrigium,	5
Stomach pump in cases of poisoning,	2
Puncturing the Tympanum,	1

Note.—Of the ordinary operations of amputation, parcentesis ; Fistula in ano et pereneo &c., I have kept no records.

We have it in our power in our humble tho' useful and honorable sphere, if not of contributting to the present policy as expressed by our Governor General, of "taking root in the affections of the people," at all events of silently doing much good, and thereby of fulfilling one of those ends for which we came into existence, and next to that due to its Divine Author, the most important duty.

The question in the following paper from Mr. Brett is undoubetdly of great importance : and no doubt our readers will be fully satisfied with the manner and ability with which it is mooted.

ON THE ADVANTAGES AND DISADVANTAGES OF OPERATING FOR CATARACT WHEN ONLY ONE EYE IS AFFECTED.

This subject being much disputed by some of the most eminent Surgeons, it may not be amiss to place the objections against operation, and the arguments in favor of it in immediate succession.

Objection. 1st.—One eye being sufficient for the purposes of life, why therefore subject the patient to the pain and inconveniences attending the operation ?

Arguments in favor of Operating—1st. When one eye is diseased, blindness must almost necessarily follow by the formation of cataract in the other eye. Ergo, it becomes necessary to anticipate the disease in the second eye, by endeavouring to restore the sight in the eye first attacked.—2nd.—Many people have a strong as well as a weak eye, and the former more often becomes diseased. —3d.—Obscurity from sympathy and habit. often results from a patient becoming blind of one eye ; especially when first accidentally discovered by him on his closing the sound eye —4th.—The sphere of vision with one eye is considerably less than with two.

Objection. 2nd.—Great inconvenience has occasionally resulted from confusion of vision, occasioned by the different refracting power of the two eyes, one possessing and the other not possessing the chrystalline humour.

Arguments in favor of Operating—1st.—Confusion of vision is not always or even generally the result of the operation.—2nd.—Supposing that confusion of vision generally did occur, the arguments in answer to the 1st objection would equally apply to this objection.—3rd—Again, the extreme anxiety of the patient in the anticipation of the disease ensuing in the other, is a strong inducement for operating.—4th.—The length of time likewise for the patient to wait until he becomes blind in both eyes, seems a needless delay, and painful state of suspense, seeing the period may vary from a few months to many years.—5th.—The diseased eye, favourable for operation, may become unfavourable, first, by accident, secondly, by inflammation of an acute or chronic character, adhesion to the Iris, &c. Amaurosis also sometimes follows from delay, and change in the consistence and volume of the lens produces sometimes internal inflammation, and also absorption of the vitreous humour which an early operation might have prevented.

Objection. 3rd.—An eye which has undergone an operation with every success, never obtains that perfection of vision which is possessed by a perfectly sound eye.

Arguments in favor of Operating.—Such imperfection is remedied by the employment of good glasses ; and the question is not as to the patient being short-sighted, but as to his having any vision at all, seeing that the sound eye becomes generally blind. Moreover, the advantage of vision even with a glass, is preferable to blindness without, in that eye, in every respect.

Objection. 4th.—When only one eye is affected, the operation has not such a brilliant effect, and the patient is seldom satisfied.

Arguments in favor of Operating.—1st.—Such a consideration is not to be placed in

opposition to the argument above adduced, and on the mind of an intelligent patient could have no weight. 2nd. It would not be a sufficient motive for the operator to be influenced by.

The above arguments would seem greatly to preponderate in favor of operating.

A few additional arguments in favor of operating may be adduced; but these are not of universal application, viz.

Arguments in favor of Operating—1st. The patient may have originally laboured under short-sightedness (Myopia). Some of these patients see better with a good glass after the operation than they did before, or than with the other eye, especially if the Myopia had been caused by deficient convexity of the lens and not of the cornea, the lens being now removed.

2nd. Patients of an advanced period of life, who become affected with presbyopia, becoming affected with cataract, often see extremely well after the operation without the use of glasses: *vide cases annexed.**

3rd. Beer and others are of opinion that from the great sympathy between the two eyes, the morbid action of the sound eye may be prevented by the removal of the complaint in the diseased eye. But satisfactory cases in illustration have not been adduced. It is contrary I should say, to general experience.

4th. The patient being young, a soldier, &c. are among the minor inducements for operating.

OBSERVATIONS.

The right eye is generally the strongest, and the left the weakest, as may be demonstrated by looking at two objects, at different distances, in the same straight line, with both eyes open, say the flame of a candle and the finger. On closing one eye, say the right, the finger will appear to move away from the straight line, and on again opening the right, and closing the opposite eye, the finger will not appear to move. The *strongest* eye seems generally to be the first attacked with cataract.

Of a hundred cases taken in regular succession eighty-eight were double cataracts, and twelve single; but of course many of these latter were of recent formation and the disease will probably follow in the other eye, in most of them. Of the above one hundred, seventeen had undergone the native operation in one eye, but the disease had not been prevented advancing in the other eye, in a single instance.†

I have seen instances where confusion of vision was occasioned to the sound eye, especially, on discovering the blindness of the other eye. Patients may often be observed to put up their hand to the diseased eye, to shut out what little sensibility to light remains, when they wish to notice objects attentively.

Mr. Guthrie states that he has met with several instances of confusion of vision, and in *one* instance the patient wished him to destroy the sight gained by the operation. Dr. Andrew Smith, however, on the other hand, gives *several* cases in illustration of the double vision not existing at all, or being only of very temporary duration. Indeed but very few illustrative cases and facts seem to have been adduced by the *opponents*, whilst the *advocates* are rather replete with them.

In my own experience, I have never seen confused or double vision, excepting on one occasion, and this did not continue. vide case of Kumber Ali Beg.

With reference to the propriety of operating on one eye to anticipate the disease in the other eye, the following cases may be adduced.

Case.— R. Anderson Esq. Æt. 64, resident in India, 30 years became affected with cataract. The disease was complete in the left, incipient in the right. I restored him to sight in the left eye two years ago, after which he became blind in the right, for which he has since undergone the operation.

Case.—W. Burt, Æt. 50, thirty years residing in India, in the King of Oude's service, was operated on by Dr. Luxmore some years ago in the right, became shortly blind in the left—I operated on him a short time since: successfully, both these patients see remarkably well with glasses, and are evident gainers, by having at no period been deprived of the blessing of sight.

The following is the result of the twelve cases of single cataract previously alluded to.

Doorjyun brahmin, Æt. 60, blind of the left eye only. The operation of reclination was performed. This patient had no confusion of vision, and saw equally well with this eye as with the other.

Case 2nd—Taj Khan, Æt. 60, cataract of right eye only. This patient on re-

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* These will be given in our next.—*Edit.*

† The native operation, I have no hesitation in declaring, is most barbarous. In these seventeen cases, fourteen were completely destroyed, and in two of the others vision very imperfect. In their best cases the internal hyaloid membrane is broken down, and absorption of the vitreous humour likewise takes place, and to either or both of these injuries may be attributed the tremulous Iris, so commonly observed, and diminished refractive power of the vitreous humour, closed pupils, Amaurosis, and general suppurative inflammation of the eye &c. often follow the native operation; independant of the many cases unfavorable for operation which are couched by them from incorrect diagnosis.

covering from the operation had no confusion of vision, and saw near objects better than with the other eye.

Case 3rd—Meea Moohummud Ghos, Æt. 55, cataract of the left eye only, had no confusion of vision after the op eration, and saw near objects better than with the other eye.

Case 4th—Hussain Shah, Syed, Æt. 60, cataract of the left eye only. Had no confusion of vision, and saw better than with the other eye.

Case 5th—Kurrim Ali Khan, Æt. 60, cataract of the left eye only. Had no confusion of vision, and sees better with the eye that has undergone the operation than with the other.

Case 6th—Kumber Ali Beg, cataract of the left eye only. Had double vision for three days, after which it subsided. Vision equally good as with the other.

Case 7th—Gunga Chumar, Æt. 40, soft cataract of the right eye. Prognosis very unfavourable. Three operations were required on this patient, notwithstanding which he sees extremely well and had no confusion of vision. Three others had very fair average vision without confusion, and two were unsuccessful.

In conclusion it appears to me, that as a general rule the practice of operating is founded on rational principles, without infringing on the aphorism of

"Quantum à rerum turpitudine abas,
Tantum te à verborum libertate sejungas"

in adopting, or recommending the measure.

F. H. Brett.

ASSAM.

(Concluded from our last.)

By Assistant Surgeon McCosh.

Animals.—Compared with those of most other jungly countries there is scarcely any peculiarity in the animals of Assam. Wild elephants are plentiful, and move in large herds. Great numbers are caught every year, and transported to other countries; but the speculation is very precarious, as many of them die before they are domesticated. A few are shot in their wild state, merely for their ivory. They are frequently very dangerous, and many of the natives are annually killed by them.

The rhinoceros inhabit the densest and most retired parts of the country. The young ones are a good deal looked after, but so difficult to be found, that a party with two or three elephants don't succeed in catching above one or two in a season, and these when caught frequently die in the nursing. The mode of taking them is first to shoot the mother, and then the calf is easily secured. Frequently the mother in her dying agonies lays hold of her young ones with her teeth, and lacerates it so severely that it dies of its wounds. In those books of natural history, of which I am in possession, the *rhinoceros Indicus* is described as having no canine teeth; but on inspection of a scull a few days ago, I found two very stout canines one on each side of the two inscisors of the lower jaw. The upper jaw was so incomplete that I could determine nothing respecting their existence in it. The old rhinoceroses are frequently killed for the sake of their horns alone, to which the natives attach a great deal of sanctity; so much so, that the general belief is, that there is no more certain way of insuring a place in the celestial regions, than to be tossed to death on the horn of a rhinoceros. These horns are as hard as bone, very stout and broad at the base, and seldom longer than eight or ten inches. They have a slight curvature towards the forehead, and in colour are as black as the buffaloe's. The horn is not a process of the bones of the nose, but united to them by a concave surface so as to admit of being detached by maceration, or by a severe blow. It has no pith, but the centre is a little more cellular than the rest. Considering the wild and sequestered habit of these animals, it is surprising how very easily they are tamed. With a little training, a young one a few months after being caught may be turned loose to feed, and be ridden by children. They contract a strong affection for their keeper, and come at his call and follow his steps wherever he goes.

Tigers, leopards, and bears, are numerous, but though they occasionally carry off a bullock, accidents to human life are rare. There is a reward of six rupees a head allowed by Government for their destruction, certain castes adopt this as their profession and make a good livelihood by it. They destroy them by means of poisoned arrows. Having found out a recently frequented track they fix a strong bamboo bow (a modification of the cross bow) horizontally, upon three forked sticks, driven firmly into the ground, and just so high as to be on a level with the tiger's shoulder. The bow being bent and the poisoned arrow fixed, a string connected with the trigger is carried across the path in the same direction with the arrow and secured to a peg. The tiger in passing along comes in contact with this string, the bow is instantly let off, and the arrow is lodged in his breast. So very active is this poison that the animal, though not otherwise mortally wounded, is commonly dead within one hundred yards of the place where he was struck.

Wild buffaloes abound in all parts of Assam. They are not much sought for

unless by some classes for eating. They are too fierce and formidable to be robbed of their young with impunity; and as they are seldom found solitary like the rhinoceros, the calves could not be secured even at the expence of the parent's life. It is the common practice to breed from the wild buffaloes, no males are kept by the feeders: the tame herd is driven towards the jungle where they are joined by the wild males, who continue in the flock during the season.

Of all the animals that roam the forest, not even excepting poisonous serpents and beasts of prey, the buffaloe is the most formidable, and the most to be dreaded when defenceless; and more inhabitants are destroyed by his gore than by all other animals put together. Scarcely a month passes without some person being attacked in this district and gored to death. A man was lately brought in to me with the whole of his stomach protruding through a small wound in the epigastric region. The horn had entered the stomach, and a small hole existed, like the mouth of a purse, into which I could introduce my finger. He had two other wounds in his body, both of which seemed mere scratches; but one of them entered the thorax, and the other the abdomen. He had been gored the day before I saw him, and been conveyed from a distance on a hurdle; but with all my care he died next morning. The only thing remarkable in this case was his living so long with wounds in such vital parts.

Climate and Seasons.—The following table shews the result of one year's observations at Gowalparah.

1834-35.	*Fahrenheit.*		*Thermometer.*		*Days Rain.*
Month.	*Morning 6 A. M.*	*Morning Noon.*	*Average 6 A. M.*	*Average Noon.*	
May ..	70	87	76	81	16
June ..	76	87	79	81	23
July ..	78	84	81	82	21
August ..	80	89	82	85	16
Sept. ..	77	86	80	82	18
Oct. ..	74	83	77	79	7
Nov. ..	63	76	69	73	1
Dec. ..	61	71	65	67	3
Jan. ..	58	66	60	63	3
Feb. ..	60	73	62	68	4
March .	63	88	68	79	1
April ..	66	88	72	79	13

From the above table it will be observed that there is a greater equality of temperature in Assam whether during the 24 hours, or throughout the year, than is general throughout India.

The hot weather is much more moderate and endurable: there are no hot winds, and a tattie is unknown. The nights are cool and refreshing, and a punkah is but seldom put in motion. It must be allowed that the cold weather is not so cold and bracing as in the Upper Provinces: during November, December, and January intense fogs prevail, impenetrable to the sun's rays, till eleven or twelve o'clock. February, March, and April are the most agreeable months in the year, and during that season decidedly preferable to most other provinces. So cool and congenial is the temperature during April that warm clothing is still in use.

Very violent storms are frequent during April, May, and June, accompanied with tremendous thunder and lightning, and by hail showers, and torrents of rain. Though very awful, and frequently very dangerous, these tornadoes are grand and sublime in the extreme; and few phenomena of nature excite a stronger sensation of interest, or gratify the observer with more majestic conceptions of the "war of elements" the wreck of matter, and the crush of worlds. One afternoon while watching the progress of one of these syphoons, I seemed literally enveloped with lightning as if the electric discharge had taken place at my feet. A few minutes after I heard that the house of a writer, about 150 yards from where I stood, had been struck. On going thither I found that the electric fluid had penetrated the thatch, descended by a post in the wall, and on reaching the floor had separated into two parts, diverging in opposite directions. The mat walls were torn to pieces, every thing in the house was turned upside down, about a dozen yards of earth were ploughed up to a depth of three or four feet, large stones were splintered, and the fragments tossed to several yards distance. The hole in the thatch presented the same appearance as if an 18 pound shot had entered, but without any trace of combustion. The writer was in the house at the time and farther than being bespattered with mud, and pretty well frightened, received no injury whatever.

Assam is quite uninfluenced by the changes of the monsoon; the wind blows from the east for more than nine months in the year, and seldom from any other direction for more than a few days at a time. At the commencement of the rain it frequently blows from the west for four or five days in succession; these westerly winds are always hotter and more unpleasant than the easterly, and are as unwelcome as the east winds in the Upper Provinces during the hot winds.

The rains set in very early in Assam, commencing in the beginning of April; nor are

they sooner over on that account; but continue till the middle of October, thus prolonging the rainy season to half the year. This long continuance of the rains, together with the heavy fog of the cold weather render the atmosphere extremely moist, and salt, saltpetre, and even sugar melt, and dissolve into a liquid.

About the 1st of July the Burrampooter is swollen to its full height, and the whole country is an inland sea. Whole herds of wild animals, no longer able to maintain their ground upon the islands where they had grazed during the dry season, then commit themselves to the tide and swim stoutly for shelter to the neighbouring hills. It is quite astonishing how rapidly they do swim, and to what a distance; but animals of all kinds, domestic as well as wild, are demi-amphibious, yet with all their strength of sinew and agility, many of them cross the boundless flood in vain. The inhabitants are constantly on the look out for such prizes, and with well manned canoes dash out into the stream and spear them before they can get to shore. Nor is their sport altogether unattended with danger; an elephant or a buffaloe is nearly as formidable in the water as out of it, even a deer or a hog is not to be run down with impunity; the boats are frequently upset, and sometimes fatal accidents ensue.

The rainy season may be called the carnival in Assam; all the labours of the field are suspended, every one seems happy and contented, and lives luxuriously upon haunches of venison, or steaks of the hog or the buffaloe. The flood of Ducalion is realized in a great measure every year. The timid deer, exhausted with long swimming and fatigue, is glad to take shelter in a cow house or a cottage. The tiger and the buffaloe swim together in amity; and the elephant and her young with the wild hog and her sucklings. The native anchors his boat to his own roof tree; performs his ablutions on his flooded hearth, and drags his net in his tobacco garden; where he oxen lately ploughed, they are swam in droves across to higher pasture; where a field of thriving grain a short time before waved in the rising sun, nothing there waves but the muddy water; the sites of large villages are known only by their roofs above the stream, and the situations of others are pointed out only by a few palm trees weeping over their drowned and deserted foundations.

Earthquakes.—Earthquakes are of frequent occurrence in Assam, and hardly a month throughout the year passes without one or more convulsions. Between 1st May 1834 and 1st May 1835, we have experienced no less than 12 shocks, viz. on the 1st July, 3d August, 6th August, 30th September, 19th October, 21st October, 6th November, 8th January, 6th February, 11th February, 23d March, and 30th April. The two last were very violent and lasted about one minute. They were much more severely felt farther up the Burrampooter, I am told, than at Bisnauth, their progress was marked by an undulation of the earth's surface like waves upon the ocean; in some parts the ground opened and water gushed through the fissures. They all proceeded from west to east with a subterranean noise like a loud clap of thunder.

These earthquakes produce the greatest alarm amongst the Natives, the moment one is heard every soul rushes out of the house into the street, and a universal shout of terror is raised and continued till all is again quiet.

These earthquakes are seldom accompanied with any serious damage; they occasionally make a rent in a puckah wall, or throw down a piece of plaster, but rarely do more; however, there are exceptions to the contrary. About twenty years ago, the natives inhabiting a small knoll near the hill of Gowalparah were so terrified by the unusual shaking of the little hill, that they fled from it for safety, and ran to a distance; but when they returned their houses and their hill had disappeared, and a large pool of water, five or six fathoms deep, occupied its place. From all I have been able to learn this story seems perfectly correct. One of the oldest inhabitants died three years ago, the pool is still known by the catastrophy and makes one of the finest and most convenient tanks possible.

Salubrity.—I come now to the most important part of this paper, viz. the healthiness of Assam, and as a prejudice has long existed against it, and some Offices have carried this feeling so far as to exact a higher rate of premium on the insurance of lives in that province, I shall endeavour to shew on what grounds they do so.

It ought not to be forgotten that all new countries in India, when first taken possession of by the British, have been found unhealthy; nor have they ceased to be otherwise, till a settled state of the country allowed them to abandon these sinks of human life, the possession of which in time of war was of the greatest importanee: till too often dearly bought experience enabled them to select stations more congenial to European constitution; till the new cantonments were cleared of their native pestilential jungle, the swamps drained, and comfortable houses erected. That this was frequently the case on our taking possession of Assam, the tombs "unlettered and unknown," of many brave officers in places long de-

From nature, by J. McCosh.
a. *River Monash.*
b. *Burrampooter.*

On the Burrampooter, opposite Gowalparah, Assam.

T. Black, Asiatic Lith: Press Calcutta
c. *Bootan Mountains*
d. *Himalayah Mountains*

serted by Europeans afford melancholy proofs. Thus Assam was saddled with a name which even to this day clings to it. It will no doubt be urged that the mortality of recent years justifies its original character, and the lamented names of Scott, Neufville, Biddingfield, Boulton, Beadon, Leslie, Brodie, and Carthcart will be adduced as evidence incontrovertible. But so far as climate is concerned these casualties might have happened in most parts of India. Mr. Scott died of Chronic disease of the heart. Capt. Neufville of gout of the stomach. Dr. Leslie died of jungle fever brought on by a two days exposure in the jungles at a dangerous season in preparing the skins of two rhinoceroses. Lieuts. Biddingfield and Boulton were massacred by the Kassyas. Dr. Beadon was shot by an arrow while too eagerly endeavouring to revenge his murdered friends. Lt. Brodie, died of fever caught in scouring the jungles at a season of the year when no European life should if possible be exposed and without European aid of any kind, and Capt. Cathcart of jungle fever induced by being exposed to great fatigue and whole day rain, and obliged to spend a night without any of the comforts or necessaries of life.

So much depends upon the selection of a station that one side of the river may be particularly unhealthy, while the other side is the very reverse. At Joggigopa a considerable detachment was at one time posted, but it proved eminently unhealthy, and though frequently relieved it generally left one or two officers behind. Yet on the opposite shore of the Burhampooter is the station of Gowalparah perhaps the healthiest in Assam. With a proper attention to the nature of the country, to the marshes formed by the river, and the prevailing winds, I am convinced that as healthy stations may be selected in Assam as in any part of Bengal Proper. But not to dwell longer on theory I shall now enter upon a more particular account of this station and leave it for others to judge of its climate.

Gowalparah.—Gowalparah stands upon the top of an oblong hill about 320 feet high, and nearly three miles round, jutting out into the river so as to be nearly surrounded with water. Indeed during the rains it is altogether surrounded, and changed into a complete island. The inundated state of the country around the foot of the hill is the less inconvenient from the most picturesque roads having been cut all round it, and its insular situation has lately been obviated by the formation of a strong bund across a wide nullah, which connects it with the main land. This jutting position of the hill always secures it the fresh breezes of the river, and as the prevailing winds are either up or down the stream it is for many miles separated from the seat of febrile miasmata. Its height protects it against the intense fogs that brood during the night upon the plains, and which do not ascend the hill till after sunrise. Not the least important advantage Gowalparah possesses is its abounding with copious springs of delicious fresh water. No small meed of praise is due to the present judge and magistrate, Captain Davidson, who about fourteen years ago selected it for a station out of such a country of jhils and jungle.

The following two abstracts, calculated from the monthly reports of the Hospitals from 1st May 1834 to 1st May 1835, will give a fair idea of the sickness at this station and qualify it for being compared with any others.

Sebundy Hospital.

Average Strength of Corps, ...		262
Do. Sick in Hospital, ...		10
Do. Sick p. cent.	3.	81
Do. Deaths of Sick p. cent.	2.	52
Death of Strength p. ct. p. an.	1.	14

Jail Hospital.

Average number of Prisoners in Jail,		260
Do. Sick in Hospital,.....		133
Do. Sick p. cent.....	5.	12
Do. Deaths of Sick p. cent.	7.	81
Deaths of Strength p. ct. p. an. ..	11.	53

I am aware that a station may be more unhealthy one year than another, and that one year's report would entitle it to be called a healthy place, and another year's report to the contrary; but the above abstracts, so far from shewing the sickness of Gowalparah in the most mitigated form, include the ravages of an unprecedented continuance of cholera, which proved fatal in nearly one half of the yearly amount of deaths amongst the prisoners.

The most prevalent disease amongst the sepoys are intermittent fever and syphilis. This last disease is excessively common; and frequently more men are laid up by it alone than by all others put together. Throughout the whole year I had not four cases of continued fever; and yet a great proportion of the Seapoys were stationed at outposts throughout the districts.

Amongst the prisoners, intermittent fever, diarrhœa, and dysentery are the most frequent diseases, and even amongst them continued fever is rare. Great allowances must be made for the mortality amongst that unfortunate class. A large portion of them is composed of old and inferior men, labouring under great depression of spirits and in despair of ever living to see

the termination of their sentence. Many of them are the inhabitants of mountainous countries, accustomed to lead a life as wild and free as the leopard or the tiger, whose chief employment was fishing or hunting, whose drink was intoxicating liquid, and whose subsistance the grossest animal food. The wild animals of their native jungles, could not when caught in a net and caged, feel more impatient of restraint than they do, when loaded with irons and put up in a Jail. The change of diet from animal food to satiety, with a large allowance of spirituous liquors, to that of rice and water, with a savouring of fish and vegetables, and even all of these in limited quantity, has, in addition to their confinement, the most depressing effect upon them, and were it not that the human stomach can accommodate itself to the digestion of all kinds of fare, these carnivorous savages would loathe the vegetable meal to which they are, when prisoners, reduced, and die of inanition.

Projected Sanatarium on the Bootan Frontier.—I cannot omit this opportunity of remarking that while a Sanatarium for the lower provinces has so long been sought for, and is even to this late hour a desideratum that the frontier of Bootan should have been overlooked At this moment while oppressed with the heat and moisture of a low country, flowing with water and perspiring at every pore in an open door temperature of 86°, I am looking out upon the mountains of Bootan capped with snow. They are not above 50 miles distant, and may be approached by water on the River Monash to within 15 or 20 miles of their base. The country between the extreme navigable branch of the river Monash, and the mountains is so very level that an excellent road could be made with little difficulty or expence to the base of the hills, and the hills themselves rise so very abruptly that the ascent could be made in two or three hours. The only difficulty to be surmounted would be to obtain the consent of the jealous Bootan Government to a grant of one of their hill tops, with a right of open communication to and from it; for the line of boundary between our territories and their's is several miles within the level country.

I am fully convinced that a station affording all the coldness and salubrity of Simla itself, and that congeniality of climate adapted to the restoration of a European constitution when worn out by a long residence in India or broken by tropical disease, could be selected in that mountain range, and that it only requires a fair trial to become the Montpellier of the Lower Provinces. The voyage thither from Calcutta and all parts on the Ganges as high as Patna could be easily performed by the present rate of navigation in from 24 to 30 days, hundreds of valuable lives could be recruited there that must necessarily become extinct on a six month's voyage to Simla, and hundreds more who could not afford the very exhorbitant exaction of 240 rupees a month for their mess and accommodation on board a Pilot Schooner, or the little less heavy expences of a voyage to the Cape or China, or N. S. Wales, could step into a comfortable boat and be conveyed in a short time to a healthy climate, at little more expenditure than the rate of living with their regiment.

Gowalparah, July 13, 1835.

LITHOTOMY *versus* LITHOTRITY.

In the following paper we find Dr. Chapman rallying round Heurteloup and Civial in favor of Lithotrity. In our selections will be found an Analysis of Civial's memorandum on Lithotrity, which will be interesting to such of our brethren as may not have an opportunity of seeing the work itself.

To the Editor of the India Journal of Medical Science.

Sir,—The last number of your journal presents us with a letter from Dr. Mackinnon of Tirhoot, embracing four distinct topics, two of a strictly professional, and two of a general and public nature; which, not being particularly addressed to any one, may, I suppose, be noticed by any one.

The first consists of observations on the relative advantages of Lithotomy and Lithotrity, in which the writer strongly urges the superiority of the former over the latter mode of operation; but, I think, unluckily brings forward two cases which makes more against than for his argument.

It would be needless to enumerate the host of operators who have successfully employed Lithotrity; the names of "Heurtaloup" and Civial on the continent, Costelio in London, and one or two I believe in this country, testify that the discovery is one of incalculable benefit to mankind, and that the operation is not only a perfectly safe and certain one, but one which may be performed by a person who never witnessed the operation of Lithotomy or used a dissecting knife: this is no trifling advantage, the cutting operation requiring a union of anatomical skill and strength of nerve, which does not fall to the lot of all Medical men to possess.

In the detail of the case operated on by Sir G. Ballingall, Dr. Mackinnon tells the truth but not the whole truth (I do not of course mean the least offence as I think that gentleman did not witness the post mortem examination, nor take into his consideration the reasons given for selecting

the high operation, in preference to the other modes, together with the difficulties of the case). These remarks I premise on the supposition that the Dr. and I allude to the same case, which was that of a boy of about nine years of age, by name David Meek, operated on at the Royal Infirmary in the season of—25-6. The reasons stated, after *consultation*, were, as I recollect, two; the large size of the stone, and the naturally small formation of the boy, for one of that age.

The difficulties of the case were also two-fold, the danger of wounding the peritoneum in making a large and free incision in a direct line from the Pubis (for on the first incision being found too small, it was enlarged by a lateral one), and the situation of the stone as it lay at the fundus of the bladder, firmly grasped and enveloped in a "Cul de sac" of that viscus. The stone proved to be large and angular, and requiring therefore force, not *unjustifiable*, but necessary, for its extraction. The patient died from peritoneal inflammation. I think it due to the character of Sir G. B. to make this statement, from my respect for him as a friend, and my admiration of him as a first-rate Surgeon, although his tact as a steady operator (arising from constitutional causes entirely,) may be questionable.

The slowness of the scientific innovation may, at first glance, appear of some weight, and is so, when the patients are very young; but when we look to the after treatment, which, in the encien régime, is in general a most important consideration, the objection I think loses its force.

On the subject of want of native faith in European skill I agree with the Doctor. The many proofs to the contrary, in the constant application for medicine daily and hourly made, by all sects and sorts of natives, indubitably prove their confidence, which is often too great, as many expect to be cured immediately and perfectly, no matter what the disease may be; as to compensation! "no more of that Hal, an thou lovest me"—and though the Doctor assures us, that "prejudices must give way to the light of intelligence over this hitherto benighted land," it must, I fear, blaze for centuries, before a native's prejudices on that head give way—at least, to any great extent.

The establishment of a Surgical Hospital, with dispensaries attached, would be a great matter for the poor at all civil stations, for it is quite impossible to resist applications, from such wretched objects for medicine, when they require it, as the private stock, which I suppose every Civil Surgeon possesses, can amply testify.

Humanity alone suggests the necessity of an institution of this sort. It would not be attended with much expense, as the cases would be chiefly surgical, such as old ulcers, dry gangrene, strumous and goitrous swellings, ophthalmia in all forms, &c. This subject merits the consideration of Government, and will, I have no doubt, ere long attract their, as well as public, attention.

The last subject on which the Doctor's letter touches, is the employment of Civil Surgeons in duties not strictly professional. Think we could do "the state some service," and can only add, I hope we may get it.

I am, Sir, yours obdtly.

J. CHAPMAN.

Purneah, Sept. 6, 1835. *M. D. C. A. S.*

REVIEW.

A REPORT ON THE MEDICAL MANAGEMENT OF THE NATIVE JAILS THROUGHOUT THE TERRITORIES SUBJECT TO THE GOVERNMENT OF FORT WILLIAM AND AGRA; TO WHICH ARE ADDED SOME OBSERVATIONS, ON THE PRINCIPAL DISEASES TO WHICH NATIVE PRISONERS ARE LIABLE. THE WHOLE COMPILED, IN A GREAT MEASURE, FROM DOCUMENTS IN THE OFFICE OF THE MEDICAL BOARD. BY JAMES HUTCHINSON, ESQ. SURGEON ON THE BENGAL ESTABLISHMENT. 8VO. CALCUTTA, THACKER & CO.

Mr. Hutchinson opens the third chapter of his work on the housing of prisoners; and referring to the necessity of erecting jails on elevated, dry, and open situations at a distance from swamps, jungles, and other sources of Malaria, shews by quoting Hennen's opinion on the accommodation of an hospital, that the buildings ought to be spacious. He then proceeds as follows.

'From the replies of Medical Officers to the circular of the Medical Board; it would appear, that in very few of the jails in India is the allowance of air to each prisoner above five hundred cubic feet—a proportion, which I am inclined to think, considerably too small. In some instances, the space is said to be even less than three hundred, an allowance, which would be so small, that it is impossible to conceive, that the statement has not arisen, from some oversight or mistake in making the calculation. The subject is one of great importance, and worthy of further investigation; for, if under such circumstances, unusual sickness and mortality should prevail, it is only what the warning voice of the most experienced writers has taught us to expect.'

'We have seen, that in the military hospitals of Europe, from six hundred to nine hundred cubic feet of air are considered necessary for each individual; and

I am not prepared to say, that much less should be made to suffice in this country. It is true, that in India the temperature of the atmosphere is higher, and that the diet of the inhabitants partakes more of a vegetable nature, both of which circumstances would appear to render a less supply of oxygen necessary * ; but on the other hand, the air being more rare may naturally be supposed, in a given space, to contain a smaller proportion of that essential to life†.

From the foregoing observations of Mr. Hutchinson's he appears not to be aware that, notwithstanding the immense consumption of oxygen by men, quadrupeds, and birds in the act of respiration, and its necessary support of combustion " whether the atmospheric air is examined in the scorching equitorial regions, over the immensity of the ocean, the elevated plains of Asia and America, the snowy summits of the Cordillera or Himalaya, the proportion of oxygen remains constant."

In India, no doubt, from the structure of our dwellings the circulation of air is much more free, which would appear to be a positive advantage, which we possess over the inhabitants of colder climates, and ought accordingly to render a somewhat smaller allowance of space adequate to the preservation of health ; I question, however, if this ought ever to be reduced below six hundred cubic feet, per man.'

Mr. Hutchinson states that he is not prepared to say, that much less space should be made to suffice in this country for the sick in Hospital than is found to be necessary in Europe. We should have been much astonished if he had. From the very circumstance that in India the temperature of the atmosphere is higher, we should think that the space being less must add greatly to the heat, and as an inevitable consequence become of itself the source of disease and much more its aggravation. If our deduction be right, the sick in this country should be allowed double the space they are in Europe. Mr. Hutchinson proceeds to shew the necessity that every jail should be freely perflated.

'In fact, the ventilation of jails, and jail hospitals is a subject, on which too much attention cannot be bestowed. It is essential on the one hand, that the prisoners should not be unnecessarily exposed to the vicissitudes and inclemencies of the weather, and on the other, that they should have the means of breathing a pure and wholesome atmosphere.'

Mr. Hutchinson alludes to the outer wall or enclosures to jails and the sufferings experienced during oppressive hot nights in India, especially in crowded jails ; and properly suggests the necessity of the walls being built at a considerable distance from the wards.

'I have heard of instances in point, though not on medical authority, where sickness prevailed to a great extent during the hot-season, and where it was effectually checked, by allowing the prisoners to sleep in the open air around the jail, a prophylactic measure, which I would strongly recommend to be adopted, in all practicable cases, wherever unusual sickness can be supposed to arise from a too crowded state.'

The following observations are worthy of notice. Our own experience fully corroborates the faithfulness of the statement.

'With the appearance and construction of our jails, there would appear to the superficial observer to be less cause to find fault, than with any other portion of our jail system ; and yet such is not the case. It is true, that these structures are in many instances more like palaces than jails, and yet they might perhaps, notwithstanding the humane and munificent intentions of Government, be more aptly compared to splendid sepulchres ; the buildings are solid and imposing in appearance, but they are too often, if not generally, ill adapted to the purposes contemplated, or for the inmates, whom they are intended to contain. The reason of this I hope to be able to make sufficiently apparent, in the course of these remarks. The natives of India, or that portion of them, of which the inmates of our jails principally consist, are accustomed to sleep in the hot-season, in the open air, and during the rains, cold-season or winter, in small huts, which cannot fail to be exceedingly warm. In either case, they sleep on the bare ground, which being an indifferent conduc-

* It is not improbable, that the high atmospheric temperature in India does not much affect the consumption of oxygen, as the animal heat generated is so rapidly carried off by perspiration, and consequent evaporation.

† The difference is said to be equal to a twentieth ; so that a human being cæteris paribus would appear to require an allowance of one twentieth more of atmospheric air, for the due support of life in India, than in Europe.

tor of caloric very rapidly becomes of the same temperature as themselves. The very reverse of this is the case in jail. The floors are often not sufficiently raised, and are in consequence naturally damp. They consist either of stone, of tiles, or of masonry plastered over, so as to present a smooth and well polished surface; this latter description, we are in the habit of calling a puckah floor or terrace. For purposes of cleanliness, it must be admitted, that these are admirably calculated, particularly the first and last; but when we come to consider them in a medical point of view, and to reflect, that the convicts sleep on these floors, with generally no covering whatever, but the *dhotee* or cloth around their loins, the case is very different. The three different kinds of floor all attract moisture from the atmosphere in great quantity, so that it cannot be particularly safe to sleep on them, at any time; but much less when the air is loaded with moisture, or when the temperature happens to be low.'

We are great advocates for boarded floors to jails and hospitals in this country: especially in Bengal they are more durable, less dusty, and exceedingly comfortable, and will prevent bowel complaints, fever, and rheumatic affections. To remedy the evil, to which Mr. H. had alluded, he proposes,

'The introduction of boarded cots into all jails, and jail hospitals, but particularly into the latter. The advantages of boarded cots are numerous; they could be prepared, at a price very little exceeding that of the common country *charpoy*, and being of an uniform size, (say six feet four inches, by two feet ten inches, and fourteen inches high) they could be placed together, so as to form a continuous platform, and again separated, from time to time, as occasion might require, either for the purposes of cleanliness, or with the view of isolating a particular individual. The prisoners would thus be raised, in sleeping, above the deleterious effluvia, which hover along the floor; they would sleep on a dry non-conducting substance, not liable to be affected by the weather, and would thus be comparatively warm and comfortable. In addition to this, in sitting they would not be subjected, as they are at present, to rest their bare feet on a cold stone or puckah floor, which cannot be otherwise than highly detrimental to persons who have never before been accustomed to it.'

With respect to the roof of the jails Mr. Hutchinson gives the preference to flat roofs. Besides the gratings of iron to the windows our author recommends pannelled doors. It must be a very badly managed jail indeed if uncleanliness is permitted in the way mentioned by Mr. H.

'To those, who are familiar with jails and jail hospitals in this country, it must be superfluous to say, that the floors of the wards, early in the morning, are often in a very loathsome and offensive state, evincing the necessity, in so far as health, decency, and cleanliness are concerned, of devising some improvement, in the mode of providing for contingencies of the sort. To every ward, in my opinion, there ought to be attached a recess fitted with a copper trough or pan, to which such of the convicts as had occasion might resort at night; it ought however to be entirely separated, from the body of the ward, by a pannelled door, so as to be as little offensive as possible.'

The other details which enforce cleanliness and proper cook sheds are, we think, generally adopted: we shall therefore, proceed to Chapter the fourth on the subject of working the prisoners.

Mr. Hutchinson says that from the hour the prisoners are taken out at sunrise, they continue to work till four in the afternoon and they do not on some occasions reach home till sunset. From the hour they return to the jail till dark is the only time they have in the four and twenty hours to cook and enjoy their single "daily meal."

They are allowed only one hour in the middle of the day to rest and refresh themselves, at which period they take a little parched gram or rice. This description of the prisoners' labour seems particularly cruel, but it should in fairness be mentioned that this is the custom with all labourers in India in the Upper provinces! they go out early and return home late, and have but one full meal in the evening. It is the habit of most of our Sepáhis also. We concur in Mr. Hutchinson's opinion however, that it is a cause of cholera, dysentery, diarrhœa, &c. The Hon'ble Company's clashees in Fort William are worked the whole of the day in the same manner in the arsenal. During the day they eat nothing but parched gram or rice; the result is that in the hot weather we have a considerable number of cases of cholera; although seldom fatal they never recover unless this injesta is wholly purged away.

'There are perhaps few men, until they have become in some measure used to it, who could continue on their legs, during the whole day, heavily ironed as these men are, even were no work whatever exacted of them: in short, we may attempt to disguise it from ourselves, as we like; but the impression is strong on my mind, that the convicts are overworked, and that many of them are destroyed in consequence.'

We do not believe this is the case all over India: it may be in some jails. We know it was not the case at Allahabad, when we were there, where, however, we had a benevolent judge. He was one who by no means countenanced crime, but would have it duly punished. The prisoners there did not undergo any work which could be properly called labour, or as Mr. Hutchinson defines it to be, hard labour. However our author no doubt writes from authority, and we hope this statement may attract the attention of Government, that where there is a judge so insensible to the common dictates of humanity he may be taught that he is acting in direct disobedience to the injunctions of a Christian and benevolent rule.

'That the present system of dieting the prisoners, or rather that the present allowance granted them on that account, is miserable in the extreme, cannot be doubted, and yet it would appear, that some magistrates, with thoughtless zeal, have not hesitated, as a means of punishing them, to curtail the poor pittance, which I have endeavoured to show, is both insufficient to preserve health, and to ward of a fatal termination, when disease actually occurs.'

'The prisoners should be fed in a manner, if not liberal, at least adequate to the due preservation of their healths. If money rations are to be continued as at present, I would recommend, that they should generally be allowed one anna per diem; in no instance less than three pice, and in none more than five pice daily, whatever might be the ordinary rate of provisions in the district. Of course, extraordinary occasions, such as the occurrence of famines, must be met by extraordinary remedies. The prisoners should be allowed to cook twice a day, in the morning and near sunset; and finally, the quality of the provisions sold to them, by the jail bunjahs, should be inspected daily by the medical officer, or in his absence, by some other responsible person appointed by the magistrate. This precaution will be still more necessary, if the prisoners are fed by contract. Finally, nothing in the shape of green vegetable substances ought to be permitted to be brought near the jail; unless under some sort of assurance, that they will be used for culinary purposes.'

The following is a very lamentable account of the prisoners working on the roads from the report of the Superintending Surgeon of the Agra circle.

'"At Bulundshuhur," he observes, "the sickness and mortality among the prisoners on the Allahabad and Delhi road have been great, and, I think, may be attributed to the following causes. They have been almost without clothing; the huts were not ready, till after the rains had for some time set in, consequently they must have been damp and unwholesome."'

'Small detached working gangs are similarly situated, and frequently, if not generally, suffer in proportion. These are detached to a distance, with often no medical assistance*, and with only the number of police peons necessary for their custody. They are heavily worked, and perhaps badly paid; and if one falls ill, the person in charge is either unable, to judge of the urgency of the case, or conveniently to spare the necessary attendants to escort the the sick person to the station hospital. The case is thus frequently allowed to assume such a form, as to render recovery doubtful, or even hopeless.'

'If the work of convicts be thus valuable, and occasionally productive of so deplorable results, we should at least expect, that it would be judiciously applied; and yet there is great reason to believe, that this is frequently not the case. Sometimes they are obliged to walk for miles to their work, heavily fettered as they are, instead of being accommodated in tents close to it; at others, they are unprofitably and unproductively employed, in carrying small baskets of bricks for the repair of the roads, for miles, when a hackery, which would carry as much as fifty of them, might be hired for a

* It gives me great pleasure to state, that since this was written, Government have most humanely ordered, on the suggestion of Colonel Galloway, of the Military Board, supported by the Medical Board, that a native doctor shall be allowed to every gang of upwards of 50 prisoners, which may happen to be detached for any length of time, beyond the reach of immediate assistance from a European medical officer.

few annas. A reference to the able report of Mr. Macpherson will show, that this is no imaginary case.'

Mr. Hutchinson suggests a merciful mode of treatment of this unfortunate class of prisoners.

'A reference to the papers of Dr. Lamb of Dacca, and Mr. Burt of Furreedpore, will show the employments, which are considered most appropriate for prisoners in this country. These are unhusking rice, pounding bricks, the manufacture of baskets, mats, cloth, or generally, any other useful arts, to which they may have been accustomed. Suitable sheds ought of course to be erected for their protection, while so employed.'

'I have purposely refrained from touching on the classification of prisoners; because I have not considered it strictly to belong to the subject, which I have undertaken to discuss. I may remark, however, that the system of classifying them, according to the period of confinement awarded, scarcely appears to me to be a judicious one.'

'There is another point of considerable importance, in some measure, connected with the subject of the classification of prisoners, and that is, the weight of the fetters, which they ought to wear. In this respect, there ought either to be one uniform standard, or if a difference is considered to be advisable, it ought to be determinate, and fixed by the tribunal, by which the offender may be tried. By a reference to Dr. Strong's report, it will be seen, that the fetters in some instances weigh seven pounds, and in others, seven seers, or perhaps, somewhat more than double the former weight. There is no doubt, that this difference must greatly affect the comfort of the convict, and it is not impossible, that in some instances, if not generally, the greater or less weight of the fetters is made to depend, in a great measure, on the amount of the bribe paid to the jailor.'

'Dr. Strong seems to think, that chain fetters are much more easily worn, than bar fetters; this might likewise be made the basis of a difference, in the extent of the punishment awarded; or if that be deemed inexpedient, and the ignominy, combined with the security of the prisoners, be considered, the only legitimate objects in view, there would appear no just reason, why chain fetters should not be generally, if not invariably, employed.'

'Whichever mode of fashioning the irons be adopted, the ankle-rings ought to be well polished, and the part of the leg, against which they are apt to rub, should be protected by leather *mozas* or guards, so as to preserve it, as effectually as possible, against chafing; two-thirds of the cases in hospital are generally the result of injuries of this nature, and when hospital gangrene breaks out, the ravages, which it commits, among these apparently trifling cases, is truly appalling.'

The following is Mr. Hutchinson's description of the clothing of the prisoners.

'The Indian convict is allowed what to him is tantamount to two suits of coarse cotton cloth, in the course of the year; but it is to be recollected, that the suit consists merely of a cloth about his loins, called a *dhotee*, and a loose scarf or *chuddur* thrown about his naked shoulders. He would appear likewise, in some jails, to be allowed a piece of coarse grass mat, on which to sleep.'

'During the rains, the convicts are frequently drenched to the skin, once or oftener in the course of the day, and when they come to the jail to be locked up for the night, having generally no change of apparel, they are obliged to remain in their wet clothes, or to remain exposed almost in a state of nudity to the reduced temperature, which generally prevails at such times. During the cold season, or Indian winter, it is true, the convicts are allowed each one coarse blanket; and scanty as this provision is, and inadequate to the purpose contemplated, it is often not served out, until the season is too far advanced, to render it of any benefit or advantage.'

It appears that the solitary blanket allowed to the convict was not served out with regularity, in consequence of which the Medical Board issued a circular to superintending Surgeons of divisions, directing them to see that the orders of the Government were carried into effect. Mr. Hutchinson however suggests that two blankets should be served out to the prisoners instead of one, one on his admission in the jail, the other at the commencement of the cold weather. On the subject of jail hospitals Mr. Hutchinson suggests the necessity of their being roomy and of the supply of the same pannelled doors and boarded cots as recommended for the jails. He also recommends that the same reports should be furnished and hospital records preserved as in native regiments. Most of the latter however we conceive to be wholly unnecessary and a waste of paper. If there ever was a refor-

mation required, in our opinion, it is in hospital reports. The present forms of these are truly ridiculous; and nothing is more unprofitable than taking up a surgeon's time in preparing documents with which the Secretary's office is crammed, but, we will venture to say, seldom examined or read. Why then does he wish to burthen his brethren with more of this unprofitable labour and incur expence to the Government by this needless waste of stationery. On the subject of diseases which infest native jails, Mr. Hutchinson says, that these are fevers, dysentery, cholera asphyxia, and hospital gangrene. Regarding the treatment of the first two, he refers to his account of the alvine fluxes of the natives, 5 vol. *Trans. Med. and Phys. Socy. Cal.* He next alludes to the efficacy of local bleeding by leeches in the commencement of dysenteries of the natives, and of blistering, or the employment of sulphur as a luxative in dysentery; and in chronic or subacute cases, especially in persons advanced in years, he recommends minute doses of sulphate of copper in combination with opium particularly where the dejections are feculent and frothy.

Mr. Hutchinson is an advocate for minute doses of calomel in combination with other remedies for the treatment of alvine fluxes of the natives. He next proceeds to treat of cholera asphyxia, his sentiments concerning which he has had no occasion to alter since the publication of his work on that subject. Mr. Hutchinson has borrowed the term from others, asphyxia!! a term appropriated by Plouguet to import suspended animation or apparent death, a *total* cessation, not of the pulse only, but of the sense and of voluntary motion. This "*Mors apparens*" is compared to a man in spasmodic cholera whose screams often rend the air, whose sensations of burning at the stomach develope violent excitement and force the sufferer in the agony of thirst to cry out for water,—cold, cold water. But instead of allaying the burning heat occasioned by the congestive state of the vessels let more heat be added says Mr. Hutchinson.

'With respect to stimulants, after the first onset of the disease, I expressed a preference for those which do not possess a narcotic power. In this my sentiments have undergone no change; the stimulant preparations of ammonia are perhaps the best suited to our purpose, *and we shall probably do well, neither too long to defer their use, nor too sparingly to exhibit them.*

What will men of after ages say to this! What will Principal Bramley's answer be to his pupils when they enquire of him what is asphyxia: will he in reply describe spasmodic cholera and tell them to add fuel to the vivid flame? Mr. Hutchinson proceeds to give a letter of the Board to Mr. Cheek, at Bancoorah, in which are some useful suggestions for the prevention of sickness and for the alleviation of the distress of the unfortunate sufferers in the jail at Bancoorah. For the cure of hospital gangrene in robust constitutions venesection and gentle action on the digestive organs by means of a mercurial; or acting mildly on the skin and alimentary canal at the same time by means of tartar emetic are recommended. Mr. H. then proceeds—

'Anodynes are at the same time indicated to soothe pain, and might be added to the above, or the desired effect might be sought for at once, by the administration of a preparation like Dover's powder, alone, or in combination with a mercurial.'

'It is not impossible, that quinine might be administered, at the same time, with one of these remedies, with a greater prospect of success, than if exhibited in its simple and uncombined form.'

'It now remains to mention a few of the local applications, which have been found most useful in the treatment of this complaint; these are the application of the undiluted nitric acid, the nitrate of silver, the liquor arsenicalis, the compound tincture of benzoin, the balsam of tolu, fermenting carrot, and charcoal poultices, camphorated spirituous fomentations, warm terebinthinate dressings, solutions of the chlorides, of nitrate of silver, lotions of diluted nitric acid, and the black wash; these are probably useful, much in the order in which they have been now enumerated.'

'As a last resource, amputation is worthy of a trial.'

Mr. Cheek in reply observes.

'To gangrene, unfortunately, I am no stranger, having witnessed its ravages on the continent, where, in men who had suffered amputation, and had so far recovered, as to have been sent to the convalescent depôt, whose stumps scarcely required any dress-

ing, in one night have I seen the stump become one putrid mass; such cases very rarely recovered. The disease I have lately had to cope with, has different features; the cases, generally speaking, consist of men of debilitated constitutions, who sink very rapidly.'

'They come into hospital with a small sloughing sore, no feverish symptoms; the countenance indicates however great depression, and shows a violent disease is going on, still the sore is not of that nature to cause any alarm; a change for the worse soon takes place, and likely, on the 2nd day, one is surprised to see the sore so much increased, to what it was the previous day, the edges turned up; in fact, I cannot describe the appearance better, than in the words used by Dr. Hennen, in his work on Military Surgery, viz. the "cup-like appearance."'

'Opiates, at the time the nitric acid is used, combined with quinine, will I think be found of great use; at least so I have found them.'

'Next to the nitric acid, have I found the solution of arsenic of use; but this, like the nitric, if not used at first, is of little service. I wash the sore clean of all filth and matter with solution of subcarbonate of potash, either cold or tepid, as most agreeable to the feelings of the patient, previous to applying it.'

'The treatment I find of most service is the nitric acid, or solution of arsenic, and afterwards to apply a pledgit, covered with ung. res. flav. c. tereb., using, if the bowels will admit of it, quinine and opium, with as generous a diet, with brandy and wine, as I can get the patients to use.'

'Amputation would have been tried in many cases, had I hoped for any good effect. I have before tried it, and found it of no avail. In the cases lately under treatment, I should have been averse to use the knife; there being no separation of parts*.

Mr. Hutchinson proceeds in refutation of this opinion to quote that of Dr. Geddes of the Madras Establishment, who found amputation when adopted an early cure in several instances. The following is Mr. Cheek's reply regarding his treatment of cholera; he has properly abstained from the use of Mr. Hutchinson's strong stimulants.

'Cholera has been very fatal, and such cases I scarcely ever witnessed. Many have been attacked in the town; but I have heard only of one case, that has escaped—the child of a *Jemadar*, who applied for medicines from my hospital.'

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* I confess, I am somewhat sceptial, if Dr. Cheek has not here rated too low the advantages to be derived from amputation, in this destructive disease. In the commencement of the year 1827, when the hospital gangrene prevailed to a distressing extent among the native troops, stationed at Prince of Wales' Island, amputation was had recourse to, in upwards of forty cases, and with a successful result, in rather more than one-half of them. The following observations on the subject, from the pen of Dr. Geddes, of the Madras Establishment, who was present at the time, appear to me highly valuable, and worthy of the most attentive consideration. "The question of amputation is one of primary and vital importance, and indeed, it would be a happy circumstance, if we could rely upon it, as a safe alternative, when other and milder measures fail us; but I fear, that, in most cases, *ultimum remedium* is delayed too long, and that under the humane but mistaken expectation of saving a limb, much more injury is done, than would *cæteris paribus* have followed the earlier adoption of such a sacrifice. The sore runs so rapidly through its respective stages, progressively deteriorating; and mortification so very hurriedly supervenes, that doubts and hesitation are liable to hazard life.

"Waiting for 'the line of demarkation,' is only sealing our patient's death-warrant, and decision in a case, (as it indubitably is) of life or death must be prompt and final.

"If a sore have resisted for three or four days all the usual means of cure; if the subjacent tissues are becoming deeply affected; if hæmorrhages supervene; if the constitution be participating to a high degree with the local affection, our only hope of safety is in the knife; and in many instances, we will be gratified with the patient's speedy recovery. To obviate the danger of the stump becoming contaminated with the prevailing affection, we must be careful, if possible, to remove our patient to a purer atmosphere, to inculcate the absolute necessity of cleanliness, and to use every precaution, that no communication take place between the convalescents and the affected.

"Having spoken so freely respecting the propriety of early amputation in this disease, I with regret acknowledge, that had I at first acted on the principles here laid down, several of our patients would, in all human probability, have lived. But inexperienced in the disease, and deceived by the occasional gleam of improvement, which the sores exhibited, I have induced to delay; however, observation soon taught me a different mode of conduct and practice."

See Remarks on Malignant Ulcer and Hospital Gangrene, by J. L. Geddes, Esq. in the 6th volume of the Transactions of the Medical and Physical Society of Calcutta, p. 164.

'In about half the cases I have treated, my usual medicines have had a fair trial, viz, emetics, and large doses of calomel and opium; about half so treated, died; and some who recovered, were so much reduced by the calomel (although their mouths were not affected), that I deemed it right to try smaller doses of the mineral, and I have since given calomel, gr. ii. extract. opii gr. iss. camphor, gr. ss., c. pip. nigr. one grain, every half hour, till the symptoms abate. About half so treated, have recovered. I am now trying, in the onset, emetics; afterwards calomel, opium, camphor, &c. The cases are so rapidly fatal, very little time indeed is allowed for medicines to take effect.

The patients were of a weakly desponding class; if then such a system of incomplete treatment would answer for them when the disease was "so *rapidly fatal*' as to allow "*very little time*" for medicine to take effect, what can be said of that treatment which enforces powerful stimulants indiscriminately as does Mr. Hutchinson's. Mr. Hutchinson concludes his work by giving some cases of dysentery, gangrene, and fever with dissections, and appends some tabular statements of prevailing diseases, of admissions and discharges of sick as they occurred in the several hospitals attached to jails on this side of India.

On the whole we consider Mr. Hutchinson's labours merit praise; and we hope they may awaken similar attention to the same subject among the Secretaries at the other presidencies.

Considering the multitude of prisoners, immense number of jails in India, and the importance of the subject of administering penal justice, we should have expected from the vast resources of the *bureau* of the Medical Board more of statistical detail and elucidating matter than Mr. Hutchinson's work exhibits. Should he determine upon giving a second edition, we would recommend to his attentive perusal the work of M. M. de Beaumont and de Toqueville on the penitentiary system in the United States, and its application in France. To this work are appended some very valuable observations on penal colonies and important statistical notes. It is very justly remarked by Lieber that the progress of mankind from physical force to the substitution of moral powers in the science of government in general is but very slow. To none of its branches, however, has this progress, which alone affords the standard by which we can judge of the progress of civil society, been more retarded than in the organization and discipline of prisons, probably for the simple reason that those for whom the prisons are established are at the mercy of society, and therefore no mutual effort at amelioration or struggle of different parties can take place. It redounds, however, to the honor of America, that the new penitentiary system has been established and successfully practised in that country. It is the abandonment of mere physical force in treating the inmates of prisons as redeemable beings. It considers them as subject to the principle of action with the rest of mankind, and although they have been under the influence of vitiated appetites and perverted views, still the American penitentiary system considers the attempt of elevating, if possible, the prostrated criminal once more in the scale of political and moral society as worthy of encouragement. In France as well as in America, this system is now hailed as a fresh triumph of mind over matter. How far it can be judiciously introduced into the jails of India is a question we put to gentlemen in the judicial department; but at a moment when His Excellency the Commander-in-Chief is seeking information how solitary confinement works in the cells allotted for prisoners from European corps, we have thought it advisable to quote from a translation of the works of M. M. de Beaumont and de Toqueville, the result of certain enquiries into the penitentiary of Philadelphia. Here—

"Nobody is allowed to see the convicts, except the inspectors, the wardens, and the chaplain. [There are some few others, who are official visitors.—TRANS.] The Philadelphia magistrates were kind enough to make an exception of the rule in favour of us. We were introduced into all the cells, and left alone with the prisoners. It is the result

of a fortnight's observation, which we here offer to the reader. The number at the head of each article indicates the place which the prisoner holds in the list, as to the time of his imprisonment in the penitentiary. We have often omitted to note it down, as the reader will find."

"No. 28.—This prisoner knows how to read and write; has been convicted of murder; says his health, without being bad, is not so good as when he was free; denies strongly having committed the crime, for which he was convicted; confesses to have been a drunkard, turbulent, and irreligious. But now, he adds, his mind is changed: he finds a kind of pleasure in solitude, and is only tormented by the desire of seeing once more his family and of giving a moral and Christian education to his children—a thing which he never had thought of, when free.—Do you believe you could live here without labour? Labour seems to me absolutety necessary for existence; I believe I should die without it.—Do you often see the wardens? About six times a day.—Is it a consolation to see them? Yes, sir; it is with joy I see their figures. This summer, a cricket entered my yard; it looked to me like a companion. If a butterfly, or any other animal enters my cell, I never do it any harm.

No. 36.—The prisoner had suffered previously a punishment in the Walnut-street prison; says he prefers imprisonment in the penitentiary, to the old prison. His health is excellent, and solitude does not seem to him insupportable. Asked whether he is obliged to work; he says, no; but adds, labour must be regarded as a great benefit. Sunday seems interminably long, because, then, he is not allowed to work.—What is, in your opinion, the principal advantage of the new system, to which you are subject? Here, the prisoner does not know any of his companions, and is not known by them. It was a prison acquaintance, who, after I had left Walnut street, again involved me in a theft.—Have you sufficient to eat? Yes, sir.—Do you believe the yard belonging to your cell, is necessary for it? I am convinced, it would be impossible to do without it.

No. 41.—A young man; confesses to being a criminal; sheds tears during our whole conversation, particularly when he is reminded of his family. "Happily," says he, "nobody can see me here;" he hopes then to return into society, without being stamped with shame, and not to be rejected by it.—Do you find it difficult to endure solitude? Ah! sir, it is the most horrid punishment that can be imagined!—Does your health suffer by it? No: it is good; but my soul is very sick.—Of what do you think most? Of religion; religious ideas are my greatest consolation.—Do you see now and then a minister? Yes, every Sunday.—Do you like to converse with him? It is a great happiness to be allowed to talk to him. Last Sunday, he was a whole hour with me; he promised to bring me tomorrow news from my father and mother. I hope they are alive; for a whole year, I have not heard of them.—Do you think labour an alleviation of your situation? It would be impossible to live here without labour. Sunday is a very long day, I assure you.—Do you believe your little yard might be dispensed with, without injury to your health? Yes, by establishing in a cellar continued current of air.—What idea have you formed of the utility of the system to which you are subject? If there is any system which can make men reflect and reform, it is this.

No. 56.—Has been convicted three times; has a feeble constitution; has not been well during the first months of his stay in the penitentiary, which he attributes to want of exercise, and sufficient current of air. He has been brought to the penitentiary at his own request; he loves, he says, solitude; he wishes to lose sight of his former companions, and form no new ones: shows his Bible, and assures us that he draws his greatest consolations from this book.—You work here without reluctance: you have said to me that this was not the case in the other prisons, in which you have been imprisoned; what is the cause of this difference? Labour is here a pleasure; it would be a great aggravation of our evils, should we ever be deprived of it. I believe, however, that forced to do it, I might dispense with it.

No. 46.—Is fifty-two years old; was sentenced for burglary; enjoys good health; solitude seems to him a punishment extremely hard; the presence of the keepers even, is a great satisfaction for him, and he would consider it a happy event, if a minister would sometimes visit him; considers labour his greatest consolation. He denies having committed the crime which caused his conviction.

No. 61.—Was convicted for horse-stealing; says he is innocent. Nobody, he says, can imagine the horrid punishment of continued solitude. Asked how he passes his time; he says there are but two means—labour, and the Bible. The Bible is his greatest consolation. He seems to be strongly actuated by religious ideas; his conversation is animated; he cannot speak long without being agitated, and shedding tears. (We have made the same remark of all, whom we have seen so far.) He is a German by birth; lost his father early,

and has been badly educated. Has been above a year in the prison. Health good. According to him the adjacent yard is absolutely necessary for the health of the prisoner.

No. 65.—Is thirty years old; without family; convicted of forgery; seven months in prison; health very good, He is little communicative; complains of solitude, which becomes tolerable by labour only; Religious ideas seem to occupy him but little.

No. 32.—A negro of twenty years of age; has received no education, and has no family; was sentenced for burglary; has been fourteen months in the penitentiary: health excellent; labour, and visits of the chaplain, are his only pleasures. This young man, who seems to have a heavy mind, hardly knew the letters of the alphabet, previously to his entering the penitentiary; he has, however, by his own exertions, attained to reading fluently his Bible.

No. 20.—Has been convicted of the murder of his wife; has been eighteen months in the pentenitiary; health excellent; has a very intelligent look; at first, he says, solitude was insufferable, but custom overcomes gradually the horror; labour becomes entertaining, and the Bible a pleasure; isolation is tempered by the daily visits of the wardens. He has learned in prison the art of weaving. The turn of ideas of this prisoner, is peculiarly grave and religious; it is a remark which we have had occasion to make upon almost all whom we have visited.

No. 00—Aged forty. Imprisoned for robbery on the highway with arms in his hand; seems very intelligent; told us his story in the following terms; "I was fourteen or fifteen years old when I arrived in Philadelphia. I am the son of a poor farmer in the west, and I came in search of employment. I had no acquaintance, and found no work; and the first night I was obliged to lie down on the deck of a vessel, having no other place of rest. Here I was discovered the next morning; the constable arrested me, and the mayor sentenced me to one month's imprisonment as a vagrant. Confounded during my short imprisonment with a number of malefactors of all ages, I lost the honest principles which my father had given me; and on leaving the prison, one of my first acts was to join several delinquents of my own age, and to assist them in various thefts. I was arrested, tried, and acquitted. Now I thought myself safe from justice, and, confident in my skill, I committed other offences, which brought me again before the court. I was sentenced to an imprisonment of nine years in Walnut street prison."—Did not this punishment produce in you a feeling of the necessity of correcting yourself. Yes Sir; yet the Walnut street prison has never produced in me any regret at my criminal actions. I confess that I never could repent them there, or that I ever had the idea of doing it during my stay in that place. But I soon remarked that the same persons reappeared there, and that, however great the finesse, or strength of courage of the thieves was, they always ended by being taken; this made me think seriously of my life, and I firmly resolved to quit for ever so dangerous a way of living, as soon as I should leave the prison. This resolution taken, I conducted myself better, and after seven years' imprisonment, I was pardoned. I had learnt tayloring in prison, and I soon found a favourable employment. I married, and began to gain easily my sustenance; but Philadelphia was full of people who had known me in prison; I always feared being betrayed by them. One day, indeed, two of my former fellow prisoners came into my master's shop and asked to speak to me; I at first feigned not to know them, but they soon obliged me to confess who I was. They then asked me to lend them a considerable sum; and on my refusal, they threatened to discover the history of my life to my employer. I now promised to satisfy them, and told them to return the next day. As soon as they had gone, I left the shop also, and embarked immediately with my wife for Baltimore. In this city, I found easy employment, and lived for a long time comfortably enough; when one day my master received a letter from one of the constables in Philadelphia, which informed him that one of his journeymen was a former prisoner of Walnut street. I do not know what could have induced this man to such a step. I owe to him my being now here. As soon as my employer had read the letter, he sent me indignantly away. I went to all the other taylors in Baltimore, but they were informed of what had happened, and refused me. Misery obliged me to seek labour on the rail road, then making between Baltimore and Ohio. Grief and fatigue threw me after some time into a violent fever. My sickness lasted a long time, and my money was at an end. Hardly recovered, I went to Philadelphia, where the fever again attacked me. When I was convalescent, and found myself without resources, without bread for my family; when I thought of all the obstacles which I found in my attempts to gain honestly my livelihood, and of all the unjust persecutions which I suffered, I fell into a state of inexpressible exasperation. I said to myself: Well then! since I am forced to do it, I will become a thief

again; and if there is a single dollar left in the United States, and if it were in the pocket of the president, I will have it. I called my wife, ordered her to sell all the clothes which were not indispensably necessary, and to buy with the money a pistol. Provided with this, and when I was yet too feeble to walk without crutches, I went to the environs of the city; I stopped the first passenger, and forced him to give me his pocket-book. But I was arrested the same evening. I had been followed by the person whom I had robbed, and, my feebleness having obliged me to stop in the neighbourhood, there were no great pains necessary to seize me. I confessed my crime without difficulty, and I was sent here.—What are your present resolutions for the future? I do not feel disposed, I tell you freely, to reproach myself with what I have done, nor to become what is called a good Christian; but I am determined never to steal again, and I see the possibility of succeeding. If I leave in nine years this prison, no one will know me again in this world; no one will have known me in the prison; I shall have made no dangerous acquaintance. I shall be then at liberty to gain my livelihood in peace. This is the great advantage which I find in this penitentiary, and the reason why I prefer a hundred times being here to being sent again to the Walnut street prison, in spite of the severity of the discipline which is kept up in this penitentiary. Has been in prison a year; health very good.

No. 00.—Was a physician; has the charge of the pharmacy of the penitentiary. He converses intelligently, and speaks of the various systems of imprisonment, with a freedom of thought which his situation makes very extraordinary. The discipline of this penitentiary appeared to him, taken in its entire operation, mild, and calculated to produce reformations. "For a well educated man," he says, "it is better to live in absolute solitude than to be thrown together with wretches of all kinds. For all, isolation favours reflection, and is conductive to reformation."—But have you not observed that solitary confinement is injurious to health? In your quality of prisoner and physician, you are more able to answer this question than any body else. I have not observed, that, on the whole, there are here more diseases than in society. I do not believe that people here feel worse as to health.

No. 00.—Age twenty-five; he belongs to the most comfortable situated classes of society. He expresses himself with warmth and facility. He has been convicted of fraudulent bankruptcy.

This young man shows a great pleasure in seeing us. It is easily seen that solitude is for him a terrible torment. The necessity of intellectual intercourse with others seems to torment him much more than those of his fellow prisoners who have received a less careful education. He hastens to give us his history; he speaks of his crime, of his standing in society, of his friends, and particularly of his parents; his feelings towards his family were extraordinarily developed. He cannot think of his relations without melting into tears; he takes from under his bed some letters which his family has succeeded in sending to him. These letters are almost in pieces, in consequence of being read so often; he reads them still, comments upon them, and is touched by the least expression of interest which they contain.—I see that the punishment inflicted upon you seems extremely hard. Do you believe it conducive to reformation? —Yes, Sir, I believe that this whole system of imprisonment is better than any other. It would be more painful to me to be confounded with wretches of all kinds, than to live alone here. Moreover, it is impossible that such a punishment should not make the convict reflect deeply.—But do you not believe that its influence may injure the reason?—I believe that the danger of which you speak must exist sometimes. I remember, for my part, that during the first months of my solitude, I was often visited by strange visions. During several nights in succession, I saw, among other things, an eagle perching at the foot of my bed. But at present I work, and am accustomed to this kind of life; I am not any longer troubled with ideas of this kind. One year in prison. Health good."

The above shews not only the great good to be derived from solitary confinement, but indicates the necessity of labour and moral instruction being applied to the system of jails. It may be argued against this, that the Government would cease to derive the advantage of the labour of convicts on the roads. To this objection we reply, that it has never been the legitimate intention of government to derive gain from the labour of prisoners: on the contrary their only intention has been to protect property and prevent crime: nevertheless the system promises indemnity from loss; for it educates the ignorant, teaches trades, as well as forms habits of industry; and hence preserves the healthy portion of the convicts from the evil effects of idleness. We have already said that it promises indem-

nity to the state, and now beg to quote the following:

"It has been asked, whether the avails of the labour of the convicts will probably be sufficient to cover the annual expenses of maintaining the prison? Upon this point I will make but a single remark, in addition to what I have already stated to you in conversation. If in France it has been thought questionable, whether the labour of the convicts would be sufficient for their support, I can say, that previously to the establishment of the new prison, we had in Connecticut as strong reasons for supposing that the labour of the convicts would be inadequate to this object, as the French themselves. Our former prison was a continual source of expense. During the last ten years of its existence, it received from the public treasury, over and above all that was earned, £8,400 per annum. Few individuals dared to hope that the new prison would support itself; and nothing but the highest evidence would have led us to believe, that adding the former annual loss to the present annual gain, the difference to the state treasury would be more than £16,000 per annum—but such is the fact.

"It is said, that free labourers in France do not find employment as readily as in America; and, as a consequence, it is more difficult to render profitable the labour of convicts. But if the free labourer is able to support himself and family, although with great effort, the convict ought to do equally well, since his maintenance costs less; and if the edifices are favourable to inspection, they may be superintended by a small number of individuals, and consequently at small expense.

"If the price of labour be less, then the expenses of support will also be less; these two things are correlative, and between them, there exists of necessity an exact proportion.

I remain, therefore, strong in the belief, that in a prison advantageously constructed, the labour of the convicts, if well directed, ought completely to indemnify the state."

There can be no question that the general system of solitary confinement imposed upon prisoners in European Regiments is injudicious in every respect. In this there is no labour, but time is wasted in idleness which is as injurious to the prisoners as it is burthensome to the public treasury. Separation of prisoners is indispensable to their redemption; but the fatal effects of isolation without labour has been fully established by experiments made at Auburn in the state of New York. Before we conclude these observations, we beg particularly to call attention to the following extract from an official report of an Inspector to the Legislature in 1833. The document fully testifies that illiterateness and intemperance are the great causes of crime in America. The remedy by temperance societies is pointed out by shewing the immense reduction in one year of 100 convicts in the single penitentiary of Wethersfield, in which the number of convicts amounted to 683. We rejoice at this intelligence, as it is an earnest of what will be the effects of Temperance Societies in King's Regiments in India, in most of which we are happy to say Temperance Societies have been instituted, and are doing an astonishing degree of good in putting down drunkenness; but it is a melancholy reflection that that vice can never be effectually abolished so long as canteens are permitted to dispose of ardent spirits, and men can at unguarded moments have access to them.

"Another fact, little less remarkable, respecting this class of men, is their general *ignorance of letters*. Since the establishment of our Prison Sabbath School, nearly seven years since, about five hundred and fifty convicts have been brought into it for instruction.—Of these, a great majority could read only in the easiest reading lessons, by spelling many of the words; and more than one hundred commenced with the alphabet. They were selected, it is true, (from the younger portion of the convicts,) on account of their illiterateness; but yet it is clear, from this statement, that the education of these men, as a class, is far inferior to that of our citizens generally. The pupils in our school are, almost exclusively, between the ages of eighteen and thirty; and the whole number, of all ages, from which they have been selected, is not more than 1640—550=1090. The proportion of illiterate men above the age of thirty is at least equal—few, if any of whom, it will be observed, have been brought into this account. For the honour of our country, it is to be hoped that no spot can be found exhibiting such a proportion of men so illiterate, between the ages of eighteen and thirty, compared with the whole population above the age of eighteen. Where is the community, whose every eleventh adult,

even of the whole population, has yet to learn the letters of the alphabet?

Another fact, which, though already notorious, is worthy of repetition here, is the remarkable *prevalence of intemperance* among this class of men. It will be seen in a striking light in the following statement. The number of convicts now in this prison is 683, of whom there had been,

Grossly intemperate, ...	230
Moderately intemperate, (regular drinking, and occasional intoxication, or either,)	278
Temperate drinkers, ...	156
Total abstinents, or nearly so, ...	19
	683

The first two classes, making 508, or nearly three-fourths of the whole number, may with propriety be accounted intemperate. Of these, 385 were under the influence of ardent spirits at the time they committed their crimes; and of the whole number, 219 have acknowledged that either one or both of their parents, or their masters, were more or less intemperate.

Multitudes of facts like these, most fully attest that intemperance is the great and overflowing source of crime in our land; and, after what I have seen in this prison, I cannot doubt, that the decrease of criminal convictions will almost keep pace with the progress of temperance, nor that its universal reign would, in the end, well nigh depopulate our prisons. To what cause but the temperance reform is it to be ascribed, that the number of state prison convictions in this state, during the year 1832, is nearly a hundred less than that of the preceeding year?"

We have read with attention Archbishop Whately's letter to Earl Grey on secondary punishments. We do not concur in all the sentiments of the Right Reverend prelate: but there are facts brought forth in his works on transportation to New South Wales which are worthy of the attention of Military men in India. Soldiers are much in the habit of threatening to take their officers' lives and committing other enormities with the view of obtaining transportation. Would not the penitentiaries now recommended be a more formidable punishment to deter men from such crimes? at the same time, as we have proved, they are humane, occasioning as little as possible of useless suffering, and unquestionably corrective, by producing in the criminal himself and in others decided moral improvement?

HOSPITAL REPORTS.

There is nothing so valuable, nothing so striking as the naked facts which are recorded in the Hospital daily case book. There we have the practitioner's experience on all the modifications of disease, faithfully and daily recorded at the bed-side of the patient. The reader follows the clinical reporter from patient to patient, learning, as he proceeds on his way, unembarrassed by the speculations of the theorist, and in no way bewildered by the doctrines and systems of men. He is in fact enlightened by close and cautious observation, and he must inevitably by patience and perseverance one way or other arrive at satisfactory deductions, with the advantage of being freed from every ambiguity as they come in full conviction on his mind as to what is or what is not successful practice. In a word, since it is admitted that improvement in the science of medicine is accompanied with peculiar difficulties, it is unquestionable that by means of clinical practice alone it can be obtained and diffused. With this view we enter earnestly into the wishes of our valued and esteemed correspondent E——.

Our brethren of General and Regimental Hospitals have already nobly come forward. We have, we rejoice to say, the promise of Dr. Stewart to supply the desideratum, so far as he is concerned; and Mr. Raleigh, as circumstances admit of his doing so, has given us every reason to believe that we shall have a continuance of his valuable communications: we have also no doubt, that we shall receive others from Mr. Wray.

It will be seen by our last number that Mr. Hunter of the Queen's Royal is as zealous as ever. Drs. Mackinnon and Finch, and Mr. Drummond have been equally forward in the good cause, and these valuable correspondents have pledged themselves to persevere. To these distinguished names we

have added those of Brett, Stott, and Dunbar. In fact we rejoice to say a spirit and zeal in the cause of Science is as it were aroused in all parts of India. The only check is the Government postage regulations.

We enter fully into the enthusiastic spirit of our correspondents. What benefits mankind in an equal ratio with the healing art; what diffuses such happiness, such consolation, such real good, as the recovery from dangerous illness of an inmate in the afflicted family? What preserves the health and strength of nations but the efforts of our noble profession. It is true, that he who braves the cannon's mouth or leads the forlorn hope may be rewarded with a ribbon, a star, or a coronet. But let humanity take the judgment seat and bring those instruments before her who have silenced the shrieks, removed the agonies and pains, and restored to health their thousands and tens of thousands,—to whom would she assign the Laurel?

A VOICE FROM THE JUNGLES.

Sir,—Ever since the establishment of the *Medical Journal*, I have taken a lively interest in its welfare, from believing it admirably adapted to prevent that stagnation and listlessness of mind from creeping over us, which is too surely induced by an enervating climate, where most of us are without important daily duties, and all need that most necessary stimulus, public opinion.

All who manfully resist these depressing and deteriorating influences have hailed, with pleasure, the advent of your journal, as an Avatar sent to deliver them from ennui and indifference, and in their place, to substitute activity of mind, and an enlightened curiosity in the progress of their profession; for they live strong in the hope of yet being useful, in their day and generation. Those of our body, who have charge of native corps, and small civil stations, have, alas! but very limited fields of practice, and can only bring their grain of sand, to the mountain of experience, which it should be the united effort of all to raise, that from it, at some future period, may be dug the materials, with which to raise medicine to the rank and honors of an exact science. The history of European disease in India, from its complicity and personal interest, must ever command our attention and sympathy, more than the diseases of natives; and I had hoped, to see in your journal a record of European hospital practice, throughout our eastern possessions. But the communicativeness of our brethren, in charge of Europeans, seems to be in an inverse ratio, to their means of acquiring knowledge; I have often wondered, what could be the reason of this: not want of materials certainly, for I well remember, that the hospital journal deserves to be published daily, for the number and interest of its facts. I will not believe, that their silence arises from indifference to the advancement of knowledge, and the wants of their less favoured brethren. Want of time is a more likely cause, but Apothecaries and Baboos could easily transcribe the most interesting cases from the Diary; it being a duty to afford this information, now that the means of conveying it exists. Perhaps some gagging "regulation" imposes the silence of which we complain, but the valuable papers of Messrs. Raleigh, Wray, and Hunter, (on si sic omnia!) seem to negative this; as I presume, these gentlemen write, without "leave"—but I should go on imagining, as many reasons as would reach the moon, without hitting on the real cause of their Aphonia—what can it be? It will gratify Mr. Raleigh to know, that his hospital reports are highly prized by the dwellers in the wilderness; and I know, that his recently appointed colleague will advance "pavi passu" with him; I only say to him, "perge, pede quo cœpisti," in which he will recognise the wish of a friend. By your efforts, and the late Medical appointments in Calcutta, I hope to see new life and vigour given to our body, by the transfusion of the young and warm blood of the 19th century, into the languid circulation of the old "Quoi Hai" system. Before closing I would suggest, that the *Medical Journal* is the proper vehicle for all facts and observations connected with medicine, not requiring lengthened discussion, and which, though too short for formal treatises, are yet well worthy of being rescued from oblivion: Let us remember, that the year is made up of recorded seconds.

Your obdt. servt.

E———.

SCROTAL HERNIA REDUCED BY OPERATION.

By Assistant Surgeon Stott.

There is no disease of more frequent occurrence than Hernia. Turnbull, surgeon to the London Rupture Society, after the most diligent enquiry throughout the kingdom, reports that the proportion of the ruptured to the whole population is one in fifteen. Juville, a celebrated truss-maker in Paris, found that one-thirtieth in Germany and the north of Europe, one-fifteenth in Italy

and Spain, and one twentieth in France and England were ruptured. According to M. Louis, of 7027 persons in Sulpetrière 220 were ruptured; at the Bicêtre, 212 out of 3800; at the Invalides, 142 out of 2500 or 2600; and at the Hospital de la Pitié, 21 in 1037. Lawrence, however, declares that it is established on the testimony of Surgeons of great experience in the treatment of ruptures that one-eighth or one-sixteenth of the human race is afflicted with this complaint, which happens indiscriminately to persons of both sexes, and of every age, condition, and mode of life. In India rupture is of far more frequent occurrence than in any other part of the world.

Seeing then the prevalence of ruptures among mankind generally, we cannot but be glad of communications which give an account of the symptoms, progress, and treatment of the disease. Mr. Stott has, therefore, set a good example by commencing a series of clinical reports on this subject. Although ruptures are common to the Natives of India, incarcerated Hernia is of rare occurrence. The capacity of the opening is so extensive as generally to admit of the largest intrusions into the aperture. Mr. Stott's is a case of strangulated Hernia in a sipáhi, on whom he successfully operated. In the management of it, he displays admirable judgment and surgical skill.

Mhow, July 2d, 1835.

I beg to transmit the following case of Scrotal Hernia requiring operation, which occurred in a Sipáhi, as independent of the unfrequency of an operation being required in ruptures happening to natives. It points out, in the mechanical obstructions existing both in the sac and between the external ring and edges of the transversalis and internal, oblique tendons (commonly called the internal ring) the disadvantage that would have attended a delay of the operation; the symptoms also arising the fourth day after the operation were altogether new to, and unexpected by me, I never having previously seen abscess resulting from its performance.

Soon after midnight of the 3d June, I was informed of the admission of the patient into hospital. About 8½ P. M. he had been attacked with violent vomiting when the rupture took place. When I visited him at 2 A. M. (a hot bath having in the meantime been prepared) I found him complaining of pain, or more properly an uneasy sensation about the lower part of the abdomen, countenance anxious, pulse not much affected, had vomited several times since admission; the tumour which was large and descending into the scrotum was much constricted by the external ring (which appeared like a cord drawn tight round its base,), was somewhat tender, and from its feel consisted chiefly of omentum. The patient was placed in the hot bath, and tartar emetic exhibited to complete nausea, and the taxis steadily employed for nearly three fourths of an hour, but no impression made; a dose of oil was given and the man put to bed.

6½ A. M. Had vomited once, in other respects much the same. It being the opinion of Dr. Palsgrave, 44th N. I.' whose advice and assistance I had in the meantime required, that further delay was of no use, I proceeded to the operation.

The sac being opened, which was indicated by the escape of a moderate quantity of dark colored serous fluid, and the protrusion of omentum, a director was introduced and the opening enlarged as far as the ring (outer) which was next freely divided so as to allow of the free passage of a finger. Some obstacle still existing to the return of the contents of the sac, the transversalis was next cautiously divided upwards, but even now though a finger could be freely passed into the cavity of the abdomen, it was found impossible to effect the reduction of the Hernia; on further examination two membranous bands were discovered passing in a direction backwards from the external tendon to the internal oblique and transversalis, and laterally compressing the sac, and though yielding to the introduction of a solid body, as a finger, effectually preventing the return of a soft, inelastic mass, as the omentum. This is my supposition, however, on the careful division with a guarded bistoury of these two bands, the contents of the sac were readily and instantly returned, the wound was secured with three sutures, and a light compress applied. The herniary tumour consisted chiefly of omentum, having about eight inches of ilium lying behind, a knuckle of which was firmly embraced by the omentum and was the only part that had changed its natural color, being of a bright red with some dark colored spots.

Pulse 78; feels easy and much relieved, R. Ol. Ricini ℥i. Tr. Opii. ℥i. M. statim sum: slept from near the operation till 2 P. M.; no stool, Habeat Ol. Ricini ℥ i. Admn. enema in Ol. Ricini ℥i. Admr. Enema cum Ol. Ricini 2½ P. M. No sickness since operation, says he feels perfectly easy, Pulse 104 and full. V. S. imbrachio, ℥

xxix. of blood were taken away and the pulse reduced to 82, still no stool, Rep. Ol. and Enema si duobus horis Elapsis, alvus hor. vesp 6 P. M. no stool, complains of pain in right side App. Hirud. no xx. Rep Ol. Ricini (unâ gutta Ol. Croton additâ) and Enema, ¼ 10 P. M. no pain on pressure, pulse 98 but soft, still no stool, Rep. Ol. and Enema (unâ unciâ Magn. Sulph. additâ). 5th passed a good night; soon after the exhibition of the oil and enema at 11 P. M. had three stools copious and fœcal, belly soft and no pain, pulse 95, to have tea. R. Pil. Hydr. Ext. Col. comp. aa gr. v, hor statim sumend 1½ P. M. body hot, and pulse 120 and rather hard. Took off the bandage and allowed abont ℥ xviij. of blood to flow; three stools since morning. After this report proceeded very well until the morning of the 7th when 6½ A. M. complains of pain in the lower part of the wound, at the same time a very considerable enlargement could be observed along the course of the inguinal canal, one stool during night, slight discharge from the centre of the wound, the sutures had been withdrawn on the 6th. App. Hirud. no xviii. and Rep. Pilul ut antea. 2 P. M, no stool, pulse 120, but small, Rep. Ol. Ricini ℥ i. 5 P. M. si opus sit 6½ P. M. no stool, Repr. Ol. ℥ iss. 7 P. M. si alv. n. p. r. 10 P. M. Since the last dose of oil at 7, had had several inclinations to vomit and once did eject some water from his stomach, pulse rapid but small, tongue white, pain still continues. Rep. Hirud. et Pilul.

8th. Passed a bad night, restless, but no return of vomiting or nausea, no pain, and body soft, four stools copious and of good color, pulse 98, tongue white, but moist, Rep. Pilul. P. M. increase of heat and pulse again occuring about noon, one stool, Rep. pilul

9th. Passed a good night and says he feels easy, no stool, pulse 96 and soft, tongue cleaning. The swelling is much increased, it commences gradually from the lower part of the wound, proceeding in the direction of the inguinal canal, at first sight it looks like a re-descent of the hernia, but a very slight examination satisfies one on this point; it being hard, incompressible, and though circumscribed very much diffused; it appears to be an inflammation of the cord. App. Lotis evaprans—and Rep. Pilulæ, 6½ P. M. complains of pain in the tumor, App. Hirud. xxx. After this he went on much in the same way, the tumor not diminishing and having an increase of heat and pulse about mid-day until the morning of the 13th, when on dressing the wound, I found an increased flow of matter from its centre, a probe being introduced was found to pass in the direction of the tumor; into which by means of a bistoury and director a free opening was made and exit given to a large quantity of well conditioned pus. App. Cataplasma R. Dec. cinchon. ℥ ij. Acid. Sulph. Aromat. gtt. xii. hor d.s. To have sago or arrow root with milk. No further febrile accessions, on the 22nd the Cataplasma was omitted, there being no discharge and wound healed.

THE INDIA
JOURNAL OF MEDICAL SCIENCE.

CALCUTTA: NOV. 1, 1835.

WHO IS IT THAT SHOULD SEE THE SICK POOR PROVIDED FOR AND ATTENDED TO IN INDIA.—We have lately read an able article by the editor of the *Medical Gazette* on the want of Medical provision for the poorer classes in the metropolis of England; now what will the conductor of that journal say when he is made acquainted with the state of things in the metropolis of this great empire. Our London cotemporary alludes to the smallness of the number of regularly appointed practitioners allotted to the duty of attending upon the poorer classes as compared with those who attend persons high in authority, and alludes to the system which formerly prevailed in that land of benevolence and charity, of ministering to the corporal wants of the destitute. The benevolent institutions of the country, even those supported by voluntary contributions are now denounced as scenes of penury and demoralization, can we hesitate then to coincide with our brother journalist that all this may be very philosophical in theory, but it is unquestionably absurd in practice, which we shall proceed to shew in answering the question with which we have headed this article. "The Malthusians and the utilitarians of every description may," says the Editor "generalize as much as they please, on the advantages that must accrue to the state from the abolition of Hospitals and work houses; but poverty and disease will not vanish at the bidding of the greatest sage among them. In their prodigious zeal for the regeneration of mankind, the *philosophers* of France about the period of the first revolution seriously entertained

the notion of destroying all hospitals, infirmaries,and asylums in that country; but luckily they took a little time to think; a commission was appointed to consider whether it ought or ought not to be done, and the verdict of the enlightened jury including as it did, the names of Laplace, Daùberton, Lavoiseor, Bailly, and Darcet, was exemplary, and explaining that hospitals could not well be dispensed with but were proper objects for the attention of Government."

Now if a similar revolution were to take place in this country and a commission appointed, they would have few hospitals and no infirmaries or work houses to abolish. Here the doctrines of the Malthusians and Utilitarians are in full operation. At a public meeting of the Town Hall it was announced that two Medical men at this presidency, Dr. Jackson and Mr. Martin have "*set forth the frightful fact that hundreds*" of sick are daily refused admission into the Native Hospital owing to the limited accomodation of that hospital, and that the natives themselves would not voluntarily subscribe for other institutions for their reception. We believe, there is scarcely more than four hospitals, on this side of India for the reception of native sick poor, it is therefore high time that we should *ask who is it that ought to see the sick poor provided for and attended to in India?* We have endeavoured to ascertain how the poor are provided for in other countries, and we trust that our enquiries will lead to a satisfactory result. Blackstone, one of the ablest and most experienced lawyers that ever wrote, informs us "that the law not only regards life and member, and protects every man in the enjoyment of them, but also furnishes him with every thing necessary for their support. For there is no man so indigent or wretched, but he may DEMAND a supply sufficient for all the necessities of life from the more opulent part of the community by means of the several statutes enacted for the relief of the poor." This then is British Law, the humane provision of which we should suppose must unequivocally extend to all parts of the British Empire. By the same authority we have quoted above we also learn that the "poor in England till the time of Henry VIII. subsisted upon private benevolence and the charity of the well disposed Christians. From this it appears that by the common law the poor were to be *sustained by Parsons, Rectors of the Church, and the Parishioners; so that none of them dye for default of sustenance;* and though by the statutes 12 Ric. II. c. 7, and 19 Henry VII. c. 12, the poor are directed to abide in the cities or towns wherein they were born, or such wherein they had dwelt for three years (which seem to be the first rudiments of parish settlements) yet till the statute 26 Hen. VIII. c. 26, the poor seem to have been left to such relief as the humanity of their neighbours would afford them." This system in those days failed; the poor were not properly attended to, in consequence of which several statutes were made in the reign of Henry VIII. for providing for the poor and impotent, and it was his son Edward VI. who founded the Royal Hospitals of Christ's and St. Thomas's for the relief of the impotent through infancy or sickness. Our question then is answered. If the people will not voluntarily come forward, and build hospitals for the reception of the sick and care of the poor, it becomes the duty of the Government to see that it is done, and enact laws for that purpose.

Let the poor then be provided for: and what will be the end of the benevolent means? why, the children will no longer be murdered because they cannot be fed, prostitution will be prevented because girls will not be sold, and those widows spared by the abolition of Suttee will find a refuge from destitution and wretchedness. But withhold, as hithertofore, the means and then must the faithful journalist who honestly and fearlessly does his duty continue to picture scenes such as those which were witnessed after the inundation of 1833, which harrow up the soul,

freeze the blood, and not to paraphrase the beautiful lines in Shakspeare still further make the very

"Eyes like stars start from their spheres."

We are no advocates for poor rates nor for the introduction of taxation, if both could possibly be avoided. We are well aware that through the whole kingdom of England and dominion of Wales the increase of poor has been very great and exceedingly burthensome; but the cause has been traced to defects of the law concerning the settling of the poor and for want of a due provision of the regulations of relief. Still this argument cannot be applied to a country where neither the Government nor its wealthy inhabitants are willing to come forward with the necessary provisions. The Press has done its utmost to awaken the native mind to a proper sense of its duty—and it has failed: are then those afflicted with dangerous sickness or bodily infirmity to be deprived of all refuge for suitable nourishment and relief? are they to be allowed to perish for want? Would this be the case even under a Mahomedan rule? We really believe it would not: there is nothing in the history of Islamism to shew, that the poor of that people were ever disregarded, then why should this stigma rest upon our Christian rule, and that in the metropolis of India, at the very seat of the Supreme Government of the British nation in the East HUNDREDS OF THE NATIVE SICK ARE DAILY REFUSED ADMISSION IN THE NATIVE HOSPITAL.—Can any fact detract more than this from the paternal character of the British rule? is it to be recorded in the annals of our history that such is for ever to be the wretchedness, misery, and sufferings of our native subjects?

We earnestly trust that it will not be permitted to be recorded against us. It is now shewn that a legislative enactment is necessary to enforce provision for the sick poor in all parts of India; for it has satisfactorily been proved that it is not to be obtained by voluntary contributions. In our next we shall shew the kind of provision desiderated as regards the kind of hospitals to be built, and the establishments to be attached.

MEDICAL AND PHYSICAL SOCIETY.—It will be perceived from the report of the last meeting of this society that the proposition for the admission of a reporter into its meetings to take down discussions for publication was lost by a majority of only one. Although the proposition was lost, considering that the voice of the public is so much in favor of free Press and publication, and the majority against us so remarkably small, we are led to hope that the day is not distant when the great good to be derived from free publication will be universally acknowledged, when our proposition must be carried and ourselves relieved from the labour of reporting. Hitherto we have given only an outline of what has been delivered by the different speakers at the meetings: but we trust, by attending to the rules of stenography, we shall be able to follow the speakers through all those labyrinths of rhetoric, for avoiding which we now suffer reproach. Having written thus far, we were favored with the following from an able correspondent. The sentiments are so much in unison with our own, that we should have embodied the substance of the communication into an editorial: but we are satisfied they will have more weight as coming directly from a correspondent for whom we have the highest esteem and respect, and who was present and attended to the whole of the discussion.

(From a Correspondent)

We have again the painful mortification of communicating to our Mofussil brethren a defeat on the subject of introducing a duly qualified Reporter into our Monthly Medical Meetings. We say mortification, because we cannot but deplore the retardation of science; and the obstructions which are cast in the way of our communicating a faithful detail of the opinions and whatever is transpiring among the largest body of Medical men that can assemble together in India. The communication and interchange of ideas, the thoughts which are struck out at the spur of the moment, the opinions, otherwise dormant, which are elicited on occasions when men

are congregated for the purpose of provoking, as it were, the appetite of Medical science, and satisfying it when provoked are what we consider benefits or privileges which are attached to a residence in Calcutta. One of the great desiderata to our distant brethren is to devise a mode whereby they may participate in these local advantages. It was in order to supply this want, that the plan of having a reporter was originally thought of, and for this reason likewise has the purpose been persevered in ; and though we have again to regret the necessity of recording a failure, yet we have abundant reason to congratulate ourselves on the scantiness of the amount of victory on the part of our opponents, and the smallness of our own short-comings towards a successful issue. The ballot-box declared only eight against seven; so that we are far from thinking that we did ingloriously.

In adverting to the reasons which seem to have obstructed our success, we can hardly express how much we rejoice at the development of sentiment which has taken place. It is always a great matter to be able to form a correct idea of the strength of our adversaries. And certainly a more complete exposure could not possibly have occurred. In fact, we are now in possession of the full tide of objections, which is urged against this measure; and a more lazy current, we conceive, the Medical seaman never had to stem. So convinced, indeed, are we of the nobleness of our own cause and the weakness of that of our opponents, that we feel persuaded the day is not far distant when the measure which has now been lost, will be carried by acclamation.

On a former occasion, when the question was first mooted, Mr. Secretary Hutchinson's primary objection was the probability that Mr. Corbyn, in taking down the proceedings at our meeting, would be likely to exert peculiar care in exhibiting his own observations to the best advantage while those of other members would fare as well as they could. With the express view of removing this objection, root and branch, Mr. Corbyn at once determined to ascertain the possibility of procuring a person well versed in the practice of reporting, and duly qualified in every respect to give an accurate and faithful representation of our proceedings. And happily he succeeded beyond his highest expectations, and secured the services and talents of a gentleman, against whom even a doubt was precluded on the score of competency.

It was in this new shape therefore that the question of introducing a reporter was presented to the last meeting. The main objection had been got rid of, and now was the time for ascertaining whether the former one had or had not been thrown in the way for the express purpose of stifling the question at its birth. Mr. Egerton seems to have dwelt upon the imperfections of the reports. Mr. Corbyn knew that the minutes he took down did not enable him to give a verbatim representation of what was said; he did not pretend to be so versed in the science of reporting, as to give the ipse dixit of every one present. All he had aimed at, because all he felt himself competent to discharge, was to present a correct outline, to give a rough sketch of what was said and done; and to preserve in the main, the spirit, rather than the letter, of the opinions and remarks which were elicited.

MEDICAL AND PHYS. SOCIETY'S MEETING.*

Saturday, October 3, 1835.

J. Langstaff, Esq. 1st Member of the Medical Board in the chair.

Mr. Sawers, officiating 3d Member of the Medical Board, and Mr. Scott, were elected members of the Society, Mr. Hough, superintending Surgeon, and Mr. Webb were proposed as members, Mr. J. Brassey, withdrew his name from the list of members.

Mr. Corbyn now rose and said that in accordance with the notice he had given at the meeting before last, he came forward with his proposition—that a properly qualified reporter should be admitted to take down the discussions at the meetings of this Society, for publication. Mr. Corbyn had only one object which was, that the important clinical facts elicited during the discussions at their regular meetings should be diffused all over India, he thought it was but fair that the members of the Society, most of whom were readers of the Journal of Medical Science, should be made acquainted with the proceedings which took place "within these walls." On these grounds he anticipated a successful result to his proposition. Long before the conduct of the

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*We really do not know what has come over the worthy Secretary of the Medical and Physical Society that the proceedings did not appear in the daily prints before the evening of the 20th. We were afraid his conservative principles had induced him to discontinue their publication altogether. We only, however, were refused the favor of a copy which is granted to each of our esteemed cotemporaries. We had in consequence some difficulty in furnishing the Bombay and Madras members with the proceedings, but we have, we rejoice to say, accomplished our purpose notwithstanding such a formidable obstacle.

journal had devolved on him, and when it was in the hands of his able and talented predecessors he had advocated the admission of a reporter, from a belief that from free publication not only the cause of science, but that of humanity would be promoted.

The resolution was seconded by Dr. Stewart. With his usual diffidence he begged to apologize for obtruding his opinion on the meeting, and the more especially as he was conscious they were at variance with those of a most lamented and revered individual, who was now no more. If any thing could have moved him from taking part in the furtherance of this resolution, it was the high respect, he might almost say, the adoration which he paid to his departed friend, of whom no man entertained a higher opinion, both as to talents, and experience, and practice, and first rate medical attainments, than himself did. But as he had manifested his opinion, while this valued friend was living, so now did he feel it his duty to persevere in it, when he was gone, and not for an over-degree of delicacy to abandon what he conceived to be an important duty. He begged to premise that his opinions were the fruits of mature deliberation He then proceeded to discuss the point that had been so stiffly contended regarding the right of private property which, it was said, would be violated by allowing a reporter to take down the Society's proceedings for publication. He argued the case hypothetically, and by his usual dexterity nullified the allegation. He begged to know, if the oral communications which there transpired were of the nature of private property, in what party or parties ought the proprietory right to be considered vested, and here he proposed, for argument's sake, several imaginary claimants of this right, and shewed the futility of all such pretensions, concluding that the discussions of the Society were for the benefit and at the disposal of all the members who might hear them. He next touched upon the interest of Science which he considered to be materially involved in this important question. It was impossible, that too much stress could be laid on the benefit which resulted from the diffusion of medical knowledge, and therefore he considered it his duty to promote that diffusion by all legitimate methods. He was of opinion that the Journal ought to be regarded as such a medium, and therefore he gave it his cordial support. In another point of view also he thought it very desirable that a reporter should be admitted. As matters were now conducted the transactions of the meeting found their way into the Journal, and that too in a manner that scarcely seemed to give general satisfaction. And though he would not deny that great credit was due to Mr. Corbyn for his exertions in this point, yet he could scarcely congratulate him on his complete success; which however was attributable entirely to the difficulty of putting oral delivery on paper by a person who had not devoted himself to that particular task. On these additional grounds therefore he would beg to urge the expediency of allowing a qualified reporter to be present at the meetings, and as he was acquainted with the gentleman whose service had been promised, he had much pleasure in assuring the meeting that he was eminently qualified for the duty, and would discharge it in a manner so as to give entire and general satisfaction.

To this Mr. Secretary Hutchinson rose to reply. He began by observing that so far as regarded himself, he did not care how the matter was determined. But he was of opinion that the introduction of a reporter would destroy the usefulness of their meetings. It would be an infringement on the private property of individuals, if their opinions were to be recorded and published to the world. It would be the same as if any person were to print a second edition of the *Hurkaru* and publish it to the world the day after the original. It would convert their society into a mere debating club, and every one would be seeking the display of his powers of eloquence, rather than the promotion of Medical science ; and in fact he altogether disapproved of this measure. In conclusion Mr. Hutchinson begged to observe that Mr. Corbyn was continually thrusting his journal on the notice of the Society.

Mr. Corbyn rose not to vindicate himself from the charge preferred against him by Mr. Hutchinson of obtruding the journal on the notice of the Society. Had that charge been correct, he conceived it would have redounded to his credit, since it was evident that his only object was the promotion of Medical science and the honor of his profession. The writings which made the journal valuable were from the most able clinical practitioners in India. To be charged with being an instrument for the diffusion of such intelligence and for obtruding it on the notice of his brethren was to him the greatest honor which Mr. Hutchinson could confer. But he could not refrain from expressing his surprise at hearing from the lips of the Secretary of that scientific and learned body, the Medical and Physical Society, a complaint that Mr. Corbyn had thrust forward his journal rather too often. True! he did thrust forward a periodical instituted solely for the good of his fellow men. The journal was not his (Mr. Corbyn's) but of the Medical profession in India: and so long as he conducted it, his object would be to

exalt the character of his professional brethren. The journal should be their independant organ; and its chief value would consist in its being the vehicle of spreading Medical knowledge and developing the talents of his brethren through all parts of the world. The day would come, though perhaps long after he (Mr. Corbyn) will have been laid in his grave, when the value of a Medical Journal in India will be felt and duly appreciated, however that might be opposed to Mr. Hutchinson's wishes.

Mr. Bramley said, that as the question under discussion, was one, which materially involved the interests of the Medical Society, he should not content himself with a silent vote on the occasion. He had waited patiently in hopes of hearing something in the shape of argument from those gentlemen who were opposed to the measure; but in this he had been disappointed, and as he had heard nothing which at all altered the opinion he had long entertained on the subject, he should without further preface, declare himself a firm supporter of the proposition. He thought, that on a question of so much importance, it would be well if the gentlemen who intended to vote against it, were to state the grounds on which their opposition was founded, that is, if they were desirous to escape all imputation of party spirit. He well remembered that when the question was first agitated, which was about the time the *India Journal of Medical Science* made its first appearance, that party spirit ran very high in the Society, and he believed that had the proposal been discussed at that time, it would have been rejected by a large majority. He had not, however, the same fear now, since coupled with the proposal, they had the assurance of the editor of that journal, that means had been taken to secure a qualified and efficient reporter. It was not for him to enquire how, or by what means, this was to be accomplished, it was sufficient that the assurance came from a member of the service to which he belonged, and this in itself, he considered a guarantee that the reports would be conducted, with judgment, discretion, and good feeling.

Mr. Hutchinson had said that no one had a right to take notes of the proceedings and publish them; and that a person might as well publish a second edition of the *Hurkaru* and claim the profits of its sale. He (Mr. B.) was of a different opinion, for he knew no regulation which prohibited members from taking notes, of the discussions and making what use of them they pleased. He therefore urged the members of the Society, not to reject the proposition too hastily, because they might find themselves in a worse predicament, than were they to adopt it, since the reporting system would continue after its present fashion, an experiment which did not appear to have given satisfaction to those who were in the habit of taking part in the discussions. Therefore, rather than reject it, from fear of being misrepresented in print, (which he had as much reason to complain of as any one present,) it is the very reason why he should support it. On this ground, then, he would recommend the adoption of the proposition, as a matter of expediency. But he would go further, than this, and endeavour to advocate its necessity. Dr. Stewart had observed that the non-resident members would look forward with pleasure, to receive the printed reports of the proceedings, inasmuch as they were supposed to contain the criticisms and comments on their productions. He (Mr. B.) quite agreed with Dr. Stewart and thought it would be an injustice to withhold them, seeing that the society was indebted to the non-resident members, for the greater part of the professional contributions. He begged to remind the meeting that they had no claim whatever to exclusive legislation, that they owed their election to the various offices in its management to their accidental residence in Calcutta; so that if they rejected the proposal, which, he could not but suppose, was agreeable to the majority, he should not be surprised to find it followed by evil consequences to the Society. He had heard the somewhat stale argument used, that there was no necessity for reformation, as we had hitherto gone on well enough! however true this might be, he had but to look at some of the leading Medical Societies in England, where the reporting system was encouraged, to satisfy him, that by the introduction of a similar system here, we might get on a great deal better. He believed that the Westminster Medical Society, owed its present high reputation entirely to the reporting system; no sooner was the close borough mongering system, so rigidly cherished by the conservatives, unveiled, by the powerful arm of the Lancet, than a new era seemed to dawn on its proceedings, and that which was once the green room for a few oral aspirants, had become the theatre—almost the seat of medical politics. He would also instance the printed proceedings in the Lancet, of the London Medical Society, and ask if they were not entitled to be considered interesting and instructive? For his own part, he always expected to derive some information from them, and he was seldom disappointed; for however simple or abstruse the subjects under discussion might be, they had the

advantage of including the free and undisguised opinions of men of sound and extensive practical knowledge. Yet it must be in the recollection of many present, that the conservatives here made a futile attempt to close their doors against a reporter —though a member of the profession, and a man of acknowledged talent—but again the *Lancet* wrought its wonted influence, and constrained these worthies to a silent acquiescence in the measure. He would not occupy the time of the Society further, than to allude to one more point, which had fallen from Mr. Hutchinson. That gentleman had said that the reporting system, if introduced, would tend to promote the interests of Dr. Corbyn's journal, at the expense of the Society. He (Mr. B.) was so far of the same opinion that he thought it would increase the sale of the journal, and that was another reason why he would vote for the proposition. It would not do to shrink from the principle of reporting, because he had been misrepresented, nor did he consider the profit and loss argument available, that in proportion as the journal encreases in popularity, the Society's Transactions, would be less saleable.

Rather than take so contracted a view of the question, he would prefer to think that the more widely and extensively the journal is circulated, the better would it serve the interests of the Society. It is an absurdity to suppose, however popular that journal may become, that it will ever yield an adequate remuneration, to its proprietor, for the labour and expense of getting it up; for Dr. Corbyn has stated this himself, and disclaimed all desire for pecuniary advantage from the undertaking. Rather therefore, than oppose ourselves to him in this measure, it is incumbent on us, to support him; since we are bound to believe that his active exertions are employed, in this instance, solely for the promotion of medical science. With this conviction he (Mr. B) should unhesitatingly give his vote in favour of the proposition.

Mr. Egerton thought the Society must feel weary with the discussion, and therefore would recommend that the ballotting for the proposition should be commenced upon. He adverted to the imperfection of Mr. Corbyn's reports, and to the transposition of the resolutions in the last report of the proceedings of the members of the medical service.*—The proposition was then ballotted for.

In favor..... 7
Against it..... 8

Lost by the majority of ONLY,..... 1

The Secretary then proceeded to read two cases of disease; one was a Mahammadan forty years of age affected with violent pains in the shoulder, hip joint, and lower extremities of the right side. The second was one of an ulcer which occurred above the ankle in a sepoy. Both cases were successfully treated by magnetism by Dr. R. Tytler. An account was read of a case of Osthenia by the same physician. Mr. Hutchinson's work on the medical mangement of jails was presented for the library. The following original communications were submitted. Observations on some diseases of European Seamen in Bengal, by Dr. D. Stewart.—A case of extensive contused wound of the integuments of the Head, by R. H. Irvine, Esq.; also, by the same gentleman, a case of dislocation of the lower jaw. A paper giving the case of snake-bite by J. T. Smith, Esquire of Bangalore, was then read. A native was bit in the hand by a Cobra de Capella, the symptoms in quarter of an hour after were insensibility, frothing at the mouth, hurried breathing, small irregular pulse, skin cold, pupils contracted. A ligature was tied tightly above the elbow, the wound was cauterised and Liq. Amm. ʒij. in Aqua ʒj. 20 min. to 2, no improvement, swelling of head and arm. Rep. Liq. Ammon. patient insensible, torpid, heavy, bled ʒxi. pulse now 60 softer, fuller, skin warm vomited twice—Rep. Liq. Ammon. et brandy ʒss. 2 P. M. Patient sinking Rep. Liq. Am. et brandy. At 2—5 improving, irritability of stomach Rep. Haust. with a few drops of Laudanum, Nitric acid applied to the wounds. Ghurrahs of cold water thrown over the head at 2—20 sinking; skin cold, p. small Liq. Ammon. ʒiv. brandy ʒiv. slightly diluted—2—30 rallying Rep. Haust.—Sinapisms to the extremitiies—2—35, vomited the draught, Ammon. Carb ʒss —in Aqua ʒj—2—15 hand greatly swollen Rep. Haust. 2—45—slightly convulsed, pulse compressed. Rep. Haust. 3 P. M. Vene sectio ʒx—3—15 insensible 3—25 pulse hurried Rep. Haust. Nitric acid to the nape of the neck—3—30 sensible of the pain of the blister—3—40 pulse small, Venesect. ʒviij. speaks 4 P. M. pupils becoming sensible—giddiness. The wounds of the hand swelled and sloughing of the integuments. The man recovered.

A communication on a post mortem examination of extra uterine pregnancy by J. S. Logan Esq. Assistant Surgeon, was next read, and a case was brought forward of Abscess of the Liver treated by Mr. Gordon. The case had been sent to

* The fact was that the first resolution was put into the hands of the chairman: The error was very opportunely rectified by Mr. Bramley and according to the correction we gave the proceedings. Such are the trifles set against our reporting, and represented as our imperfections.

the Medical Board in the usual course of official reports : it was one of those extracts from the case book which are often noted during the pressnre of hospital dnties; but few Surgeons under such circumstances would wish to have his practice snbmitted to the critical acumen of a learned society. The case was imperfect, inasmuch as there was no report for several days.

Mr. Corbyn here rose and objected to the discussion of the case as not fair towards Mr. Gordon, and declared that it should not be recorded. Dr. Goodeve was of the same opinion with Mr. Corbyn as to publication,and he concurred that such cases should not be brought forward. This seemed to be the general feeling of the meeting.

Under the circumstances to which we have alluded we do not think it would be just to Mr. Gordon to give the full report of the discussion, at the same time there were clinical facts elicited connected with his case which are of too much importance to be hid to gratify the enemies of "*pernicious publicity.*"

Dr. Stewart remarked that whenever a patient presented himself who had recently been treated for liver complaint, but still at the end of six weeks or two months continued to suffer from dull pain and tension in the side, with a dry skin, and general low degree of fever, it was proper to suspect the existence of abscess, and necessary to satisfy one's self very carefully on this point, before resorting to any active depletory measures. These if pursued, as they ought to be when the object is to subdne too high arterial action, would have now the debilitating effect which would prevent suppuration from following its natural and healthful course towards the surface, by a safe channel formed by the adhesive inflammation of the adjoining parts. In the lungs this course was perhaps the safest of any, and the progress in that direction was always easily detected. It was not so easy when the abscess tended to burst into the colon. Indeed it may and generally becomes known only from observing the pus, which passes per anum quite involuntarily in bed. An important consideration was the time and mode of opening abscesses which point externally. He considered that this should be done early, and before the parietes were already so thinned as to give the chance of a large slough occurring. A small aperture with a lancet allowed the matter to drain off gradually, as is practised in mammary abscess, and prevented the sides from falling in on each other and forming small abscesses.

Dr. Stewart concluded his remarks by adverting to Mr. Twining's prognosis of deep seated abscess namely tension of the right rectus muscle. This he had observed to be an unequivocal symptom of abscess, when affecting one muscle more than the other.

Mr. Egerton thought it questionable whether suppuration should be promoted or abscesses opened in cases of hepatitis in the manner alluded to by Dr. Stewart; and with the view of illustrating his opinion of the case, he would advert to Psoas abscess, would a surgeon administer stimulants in such a case to promote suppuration ; nevertheless he would be glad to promote the object of adhesion when abscess was inevitable in hepatitis in order to promote the discharge externally. In such cases he was guided by the pulse and the appearance of the tongue, and the remedies he would administer would be the sulphate of magnesia and bark.

Dr. Goodeve said that with respect to Dr. Stewart's observation regarding the tension of the rectus muscle as a sign of the formation of abscess in the liver: this might have been the opinion of Mr. Twining, but the tension of the muscle alluded to was also a sign of every painful affection of the liver.

Mr. Egerton did not immediately recollect the opinion of Mr. Twining on the subject; but his experience in some cases in the Lower Orphan School, not of abscess in the liver, but in Psoas abscess, the rectus muscle was tense, and the child would shrink under the terror of the touch. Mr. Egerton alluded also to Abernethy's mode of operation in Psoas abscess.

Mr. Hutchinson made some observations, but expresssed a wish that they might not be reported, and it might be thought unkind in us not to comply with his request, and as this wish had been already twice repeated in the course of the evening we prefer on this occasion extending our courtesy to Mr. H. although we regret the sacrifice which is hereby made at the expense of our mofussil brethren.

SELECTION.

University of London.

Clinical Lectures by A. T. THOMSON, M. D. Physician to the Hospital, and Professor of Materia Medica in the University.

INTRODUCTORY ADDRESS.

Gentlemen,—That event to which the professors of the medical school of the University of London has so long looked forward with an anxious and expectant eye, the establishment of an hospital connected with and dependent upon this school, has at length arrived, and you are now in possession of a place wherein the value of the speculative opinions which you may hear pronounced in the class-room,

can be correctly ascertained. I need scarcely, indeed remark, for the opinion is too trite not to be generally known, that it is only at the bed-side of the patient that the practical physician or surgeon can be formed; it is there that the finish must be given to the education of the student; it is only there that theories possessed of any value can be raised, because there only can they be formed by legitimate inductions from *facts*. But, Gentlemen, in what manner are these desirable results to be accomplished? An hospital is opened to you, and its wards already contain a sufficient number of patients to afford materials for the best clinical instruction—namely, forty patients, twenty-two of whom are men, and eighteen are women.* Thus you have access to disease, the means of studying which, and the method of treating which—the end and object of all your prior studies—are before you and around you. The only question for your consideration is, how are you to benefit most by these advantages? Is it by tracing the footsteps of the physicians and surgeons from bed to bed, by listening to the reports of the cases under treatment, and the names of the remedies prescribed, and then reflecting no more on the scene before you, until the period of the next visit recals you to the spot to listen to similar recitals? By such means it is impossible for you to acquire a readiness in the discernment of diseases, and a familiarity in the employment of remedies; and should even all that you hear be committed to the note-book, the mass of recorded cases will afford no other resource than that of a servile, and assuredly too often a dangerous imitation. I am certain, Gentlemen, that you must mentally assent to these assertions, and that your introduction to an hospital, without developing the means of making its inmates available for your instruction, would be placing you in the condition of Tantalus, with the stream of knowledge flowing past your lips, without power on your part to taste its refreshing waters. It is the duty of your teachers to prevent such an evil, and with this conviction on my mind, I think that I cannot do better, as an introduction to the course of clinical instruction which I am called upon to deliver in this place, to present you with an outline of the plan which I intend to pursue, and to inform you what benefit you are likely to derive by following it in your attendance here.

In the first place, I must suppose that none of you will enter as pupils here, until you have acquired sufficient knowledge of *anatomy* to enable you to detect deviations from healthy structure; a sufficient knowledge of *physiology* to recognise with the eye the distinction between healthy and diseased functions, the degree of the latter, and the consequences to be feared from it; sufficient general knowledge of the *theory and practice of medicine* to enable you to distinguish the broad outlines of diseases; and a sufficient knowledge of *materia medica* to enable you to judge of the effects of remedies, and the circumstances that modify their operation. Taking these things for granted, I shall now point out the manner in which I mean to proceed to initiate you into a knowledge of the treatment of the sick.

In following in some degree the footsteps of my learned colleague, I must decidedly throw any weight which my opinion possesses, into the balance in favour of small hospitals for clinical instruction, and it is only in such an hospital as this is, that the plan which I have in view can be advantageously followed. It is my intention, therefore, to select in each of the wards under my charge a certain number of cases to which your attention will be most particularly directed, and to keep them closely before you go through every stage of their progress, to teach you the essential diagnosis of their morbid state, the hopes and fears with which the result may be regarded, and the general maxims of the treatment, thus illustrating the nature of the ordinary symptoms, investigating closely whatever is doubtful, throwing all the light which I can upon whatever is obscure, and explaining as we proceed every part of the treatment. In selecting in this manner a few cases at a time, I am satisfied that you will acquire more information than from listening to the "report," and casting a cursory glance upon ten times the number of patients. By confining your attention also to a few cases, and by remarking upon them at the time, as far as this can be consistently done at the bed-side of the patient,—and when that would be indiscreet, in the lobby of the wars,—I trust that I shall be able, independently of my weekly lecture, to demonstrate to you every circumstance that may arise in the progress of each case, which can tend to clear up obscure points in its pathology, and afford correct principles for its therapeutical management. Whether in trying new remedies, or making new applications of those already known, I shall endeavour to enable you to discriminate between those changes which are the result of the conservative efforts of the constitution, and those which can be justly ascribed to the powers of the medicines; and, finally, how far the condition of the patient, either mentally or bodily, has modified the remedial influence of the latter, so as to authorize us to calculate the extent of their powers, and determine how far we can confide upon them in similar cases. By proceding in this manner, I trust I shall be able to excite an interest in each case to allure you, as it were, to study it closely in every stage, to make it a matter of daily contemplation and nightly reflection, and to rouse the ardent spirit of scientific inquiry, and prevent you from being satisfied until everything is explained, everything understood.

Now Gentlemen, let us suppose that a case is brought into the hospital, the nature and causes of which we wish to discover, with all the information requisite for us to determine in what manner it is to be managed. There are two points of view in which every case is to be regarded: one is *historical*, in which we

* At this time (Dec. 2nd) the hospital contains upwards of eighty patients.

are to draw our knowledge from the observations and relations of others; another is *direct* in which we become ourselves the observers. In both a certain method must be pursued, in order that all the circumstances essential to be known may be naturally and easily developed, without over-looking anything which may not be allowed to fall to the ground disregarded. In learning the history of a case. the first facts to be sought for, are the *age*, the *temperament*, and the *occupation*, of the patient. It is essential to mark the first because some diseases are more common at one period of life than at another; and the same obvious symptoms are often to be traced to different sources, according to the age of the patient. The second, *temperament*, not only modifies the influence of morbid causes on the nervous centres, but it does so most strikingly in the action of medicines; consequently a remedy which would prove truly salutary in one individual, would exert a deleterious influence on another; and, if we could ascertain this only by witnessing the effects of medicines in each case, our error might often be discovered too late to undo the evil. With respect to the necessity of knowing the *occupations* of individuals, we have daily examples of its importance in deciding on the causes of disease. Thus, during the time that the masons were occupied on the columns of the portico of the University, several of them became patients of the Dispensary, with hæmoptysis and cough, indicating incipient phthisis. Their temperament was such as led to a suspicion of the existence of latent tubercles in the lungs; these had hitherto been quiescent; but in fluting the columns above their heads, and constantly gazing upwards at the work, siliceous particles were introduced into the lungs, and these acting as mechanical irritants, the tubercles were hurried into an active state, and the foundation of a fatal disease was laid. On the same principles, a patient whose complaint is colic, is more easily and rapidly cured if we ascertain that he is a painter, a plumber, or a compositor in a printing office, or even a porter in a manufactory of lead, than if we were ignorant of the nature of his occupation; because, by knowing this, we at once conclude that his disease is colica pictonum, and the appropriate remedies are immediately applied. Other important features in the history of the case, are, the prior state of health of the invalid; the period of the attack of the disease; whether it was sudden, or preceded by any of the symptoms which usually preface such an attack; whether the patient were exposed to known existing causes; and, finally, whether he have ever suffered from the same disease before, and how far it is connected with hereditary predisposition. But if such an historical statement aid our diagnosis or determination of the nature of the disease, how much more important is our personal examination of the patient! This, then, is the manner in which I recommend you to derive information from such an examination.

In the first place, ascertain every thing that can be learned by careful ocular inspection of the patient: examine *attentively* his complexion, whether it be ruddy, or pale, or defective in clearness; whether it display any eruptions, and the character of these, and whether they extend to the rest of the surface; whether the body be large or small, full or spare, plethoric or wasted; whether any particular parts, more especially glandular organs, be swelled or attenuated, and whether he have the entire command of his arms and limbs. All of these are most important objects of investigation, and ought to be clearly made out and noted down before we proceed to inquire into the condition of the internal organs. Even the size of the hands and the feet should not be overlooked, since we learn from Dr. Cullen, whose personal observation led him to remark, that men with hands and feet that are short in proportion to the rest of the body, are liable to a plethoric state of the lungs; and there is no doubt that the small capacity of the chest in reference to the rest of the trunk of the body, the flatness of the cranium, and several natural deformities, affect the circulation and distribution of the blood; and modify, not only the characters of disease, but also the operation of medicines. Besides, the condition of the exterior guides us in our inquiries respecting the internal organs; thus, if the countenance be anxious and depressed, the lip pallid or livid, and the skin thick and dusky, our attention is at once directed to the condition of the lungs and the heart; we call in the aid of auscultation and percussion, and direct all our means of investigation to ascertain how far the disease belongs to one or to all the organs of the thorax. The state of the pulse undoubtedly affords us much information upon the state of the circulating system. But, without referring to the stethoscope, there can be no doubt that the ear tells us almost as much respecting the state of the respiratory organs; and in many diseases of the chest it is unnecessary to say how important it is to ascertain the state of the respiration, whether it be bronchial or vesicular, whether pectoriloquy, or rhonchus, or sibilus, or large or small crepitation, be present; and in employing percussion, whether the sound be hollow or solid. We should inquire carefully respecting pain, and cough, and expectoration; the capacity of the lungs by a full inspiration; the state of the breathing in different positions of the body, in various postures, and under distinct efforts of muscular exertion. If pain exist, it is, also, of primary importance to determine whether this be purely muscular, or in the serous membrane, or in the substance of the lungs. Again; if locomotion be impeded, we are led at once to examine the state of the brain and the spinal marrow—to ascertain whether accidents, or sedative poisons, such as lead or arsenic, or whether mental affections, such as produce, for example, masturbation, may have been the causes of the diminished nervous energy, and how far this is remediable. We question the patient regarding the existence of pain in any part of the cranium, or a sensation of

weight, or vertigo, or any defect of vision, or of acuteness in the function of the ear; how he sleeps; whether he dream; and, if wakeful, whether this be accompanied by mental illusions or phantasms.

If there be general or partial attenuation of the body, we inquire into the state of the organs of nutrition, into that of the stomach itself, as indicated by the tongue, or by pain or uncomfortable feeling at the scrobiculus cordis. We inquire into the state of the appetite, and the progress of disgestion, defects in which are made obvious by the flatulence, eructations or spasms; we inquire into the state of the liver, judging by the feelings of the patient in the region of that important organ, and, by tracing with the hand over the surface of that viscus, thus ascertaining its magnitude, its hardness, or its softness, and the sensations produced by pressure on it. We learn also the the state of the mesenteric glands and the abdomen generally, by the form and fulness of the belly, and ascertain whether any effusion of fluid have taken place, or any pain exist, either with or without compression. Respecting the habit generally, we investigate the state of the sensations, inquiring whether the patient feel hot or cold; whether he perspire inordinately and at what periods; and whether the perspiration be dependent upon debility and morbid susceptibility of external impressions, or is connected with that condition of the system which constitutes fever.

Having thus made ourselves acquainted with all the particulars of the case, it remains for us to prescribe for the patient, and here we arrive at the end and aim of all our previous investigation. In applying means to relieve existing symptoms, our great object is to ascertain, as nearly as possible, the exact constitution of the patient, his hereditary predispositions, if any exist; his habits, and even the condition of his mind; his temper, and his intellectual habits,—all of which, more or less, modify the operation of remedies, and in an especial manner their doses. Thus, if in one man great nervous susceptibility of impression exist, producing what may be termed a febrile predisposition, causing him to be acted upon by every circumstance, whether mental or corporeal, and wasting down the powers of life; and if in another the opposite state be as obvious, one which is manifested by a diminished sensibility of the nervous system, indicating greater necessity for the employment of powerful stimuli to rouse the energy of the system,—it is scarcely requisite to say that in these two opposite instances even when the same symptoms indicate a similarity of the disease existing in each patient the same medicines or the same doses of medicines would not be applicable. Even the moral character of a patient must be studied; and you will have frequent opportunities of observing that this often opposes obstacles to the usual influence of remedial agents. In illustration of this fact, let us suppose two persons of opposite moral habits to be under the influence of gonorrhæa. The high moral rectitude of the one, and his anxiety to be cured of a disease which he regards as a stain upon his character, will cause a constant direction of his mind to the seat of the complaint. A vascular fulness of the mucous membrane, and a state resembling chronic inflammation, are thus likely to be superinduced, and to resist the influence of the remedies, which would speedily cure the disease in the patient with whom the disease is a matter of no anxiety and reflection. In the one case the difficulties are almost insurmountable; in the other, we have merely to keep our patient from his usual habits of dissipation, to ensure the therapeutical effect of the management of the disease, and its speedy removal. It is unnecessary to proceed with the illustrations; we shall have ample opportunity of demonstrating the necessity of an intimate acquaintance with the subject of them in every stage of our clinical inquiries.

But, Gentlemen, in all these proceedings you are only spectators, remarking the progress of disease, and the influence of treatment under the hands of another, perhaps detecting his errors. It will be happy for you in doing so if you profit by my blunders, and establish them in beacons that may warn you, in your own course, from the same quicksands.

But mere looking on, however close and assiduous it may be, will not teach you to recognise and refine the nature and degrees and consequences of disease. It will not give you confidence in your own strength; it may make you imitators, but it will not enable you to demonstrate that cases, similar in appearance and agreeing in symptomatic relations, may often really be different or contrary in character, and require another if not a totally opposite method of cure. No, Gentlemen, after your probation as spectators has taught you general principles, you must try your own strength under the eyes of your teacher, and display your powers before your fellow students. Our employments admit of the same means of study as other liberal arts. If a painter wish to perfect his pupil, he does not merely paint before him, nor does the sculptor merely mould into form and expression, the inanimate clay, nor the architect measure with his compasses and balance the fair proportions of the palace he is building before his pupil, if he wish that pupil to inherit his mantle; but he gives him an object whereon to exercise his own powers, afterwards pointing out to him the errors in his progress, and the proofs of advantage which he has derived from the instructions he has received. The same plan may be pursued in medicine; and here we may remark on the peculiar advantages of a small hospital, where all is under the eye of the teacher; and where, at one view, the teacher can observe both the state of the sick and the conduct of the pupils. It is my intention, therefore, Gentlemen, to distribute so many of the cases in my wards among the advanced pupils as I may see fit, superintending and directing their examination into the symptoms of each patient in the presence of the whole attending pupils; and requiring from them daily reports of the condition of the patients under their care, and their opinion as to diagnosis, prognosis, and method

of cure; with their reasons for prescribing a particular diet and medicines. Each case will thus become a study to the pupil who superintends it. He will then see more clearly the doubts which often affect diagnosis itself, and before he is called upon to combat disease with his own resources, he will have become aware of those uncertainties which attend, and must always attend, the art of healing, and which, to employ the language of a great foreign clinical teacher, "prescribe to the artist a prudent moderation." In superintending this part of your clinical studies, I shall reserve to myself the right of approving or modifying or rejecting what you propose; and besides holding consultations at the bedside of the patient, I shall point out to you, in greater detail, my private opinion of the case, and of your views of it. In pursuing this course, Gentlemen, I trust we shall work together for good; you shall walk with me, but I will be your guide; and, in being so, I shall exert every power which I possess to enable you to use your senses as well as your understandings, that whilst we observe and learn, the sick may profit, and the gratitude of our fellow men reward our exertions.—*Lancet, Dec.* 1834.

ANALYSIS OF M. CIVIALE'S MEMOIR ON LITHOTRITY.

Read at the Academy of Sciences, Oct. 1834.

In this paper M. Civiale gave a concise description of the different instruments invented for lithotrity, and pointed out the different inconveniences of each. Before entering into a comparison of the two operations, he pointed out the occasional necessity of each, and also entered into a lengthy detail on the use of the different instruments invented.

1st. In cases of small calculi, and where the stone is large and easily broken; or, if hard and reduced to fragments, he states the three-branched instrument is always attended by the most satisfactory results. A number of cases he enumerated, in which the operation lasted about five minutes, and one sitting sufficed for the cure.

2nd. When the calculus is large and very hard the pressure alone is not sufficient. In such a case, he states it is necessary to perforate the stone before it can be reduced to powder. The operation is then more complicated, as it requires many sittings before the stone can be destroyed. Nevertheless, he appears to prefer the three-branched instrument, for he states it is less painful, and its repetitions are much less than are generally supposed. Out of 244 cases operated on by M. Civiale, the average is about four sittings, and each of them of very short duration.

In every case the perforating instrument was only employed as a preliminary means of facilitating the crushing of the stone.

3rd. The perforating instrument, he adds, should be exclusively reserved for those cases in which the stone is large and hard. The treatment in such cases is long and painful, and, occasionally, a number of sittings are necessary to complete the destruction of the stone. The author, however, gives the preference to the system of percussion, and states, in every case for the future, he shall use and modify it as occasion may require.

After having spoken of the application of each proceeding, he specified the cases in which each ought to be preferred. The following are his views of the manœuvres necessary for either of the instruments.

"The three-branched litholobe grasps the stone; it cannot escape either by the lateral openings, as they are diminished according as the instrument is closed, or by the anterior opening, as it is retained by the hooks. Thus, in every case when the stone is of small size it is easily seized and firmly fixed. This result is owing to the mechanism of the instrument, and the operator by it may judge of the precise position in which he has grasped the stone.

"When, on the contrary we use an instrument with two blades, there is always a certain difficulty in ascertaining the position of the calculus relative to the instrument. Consequently in closing the two blades, particularly if the stone is not flat, and the two branches are not applied exactly in the centre of it, the stone escapes. This part of the operation, then, is all chance, and there is no certain means of seizing the stone in the centre.

"Independently of this risk, the patient is put to much suffering, the exclusive result of which is owing to the mechanism of this new instrument. Every time the operator wishes to know whether the stone is in the instrument, he is obliged to approach the blades; if it is not in them, or if it escapes, he is obliged to open them again, and so he continues opening and shutting the apparatus. These different movements cause acute, and sometimes unbearable pains; whereas by making use of the ordinary apparatus, the instrument is not closed until by means of the *lithotriteur* the stone is ascertained to be in the instrument. This important point does not appear to me to have sufficiently fixed the attention of surgeons; it is, neverthless, remarkable that it has not, from the slight degree of pain it produces, and the precision with which one may by it perform the operation.

"The means that I employ for breaking the stone in cases of small calculi acts momentarily, without concussion, without any movement of the apparatus, without, in fact, changing or adding anything; the hand of the surgeon is applied against the *cuivrot*, and taking a point of support on the *rondelle* of the *lithotabe*, suffices to break the stone between the head of the *lithotriteur*, and the hooks of the branches. By this means, the surgeon can ascertain with precision the necessary force.

"By the new proceeding, on the contrary, the pressure and percussion are executed by a brutal force, which it is almost impossible to graduate. The employment of this requires different movements and some additions, which complicates the manœuvre, and renders it uncertain.

Afterwards he spoke of the inutility of the three-branched instrument in cases of hard and large stones, and in such cases he gave the preference to the employment of the perforator.

Such are the judicious reflections suggested by M. Civiale on a comparative examination of the two methods which are disputed at the present day. His extensive experience has enabled him to appreciate the value of each.

SOCIETE ANATOMIQUE.

Bullet lodged in the Lungs 25 Years. The ball struck the head of the humerus, which it fractured, then penetrated above the right breast into the right lung. In consequence of the extensive fracture the head of the humerus had received, the limb was amputated. The patient speedily recovered from the amputation, but suffered from frequent accessions of difficulty of breathing, and hemoptysis, from which 25 years after the wound she died. The ball after death was found behind the third intercostal space, in the midst of the pulmonary tissue, which was adherent, together with the pleura of this point, to the third and fourth ribs. The cavern, in which it was lodged, communicated with the dilated bronchiæ.

Laryngitis.—A woman 24 years of age, died during a paroxysm of suffocation, five days after an attack of acute laryngitis, accompanied with difficulty of breathing and puriform expectoration, &c. On examination of the body, the mucous membrane of the larynx was found healthy, but the sub-mucous cellular tissue, to a great extent, was destroyed by ulceration, the cricoid cartilage was completely denuded and bathed in pus.

Cicatrix in the Stomach.—A man, a patient of M. Rochoux, was subject to the vomiting of black matter, which caused this gentleman to believe he had cancer of the stomach. He died from hæmatemesis. On the autopsy, the mucous membrane of the œsophagus, stomach, duodenum, and a portion of the small intestine were found of a dark red colour. The superior wall of the stomach, to the extent of two inches, was completely destroyed. This loss of substance was filled up by the liver, the fibrous membrane of which was thick and of a lardacious aspect. The surrounding portion of the stomach appeared completely modified.

Atrophy of the Brain.—At the autopsy of a person, who died of epilepsy, at the age of 26, M. Saint-Yves found one of the hemispheres of the brain considerably atrophied, and reduced at least to two-thirds of its natural volume, compared with the other hemisphere. The circumvolutions of the brain were flat, thin, and indurated. The opposed side of the cerebellum was equally atrophied.

Obliteration of the Crural and Iliac Veins.—The subject of this case was collected by M. Tessier. It occurred in a woman affected with numerous syphilitic ulcers and œdema of the left leg. The iliac vein was obliterated by a false membrane at its entrance into the vena cava. During life no other symptoms than œdema of the opposite leg had excited the suspicion of phlebitis.

TEMPORARY LODGEMENT OF FOREIGN SUBSTANCES IN RESPIRATORY TUBES.

Case 1.—*Removal of a Foreign Substance from the Larynx.*—Patrick Doyle, ætat. 56 years, residing in the Glen of Imail, in the county of Wicklow, in January 1834, while eating pork and speaking at the same time, had a bit of the meat stuck in his throat. I did not see him until after the lapse of twenty-four hours. He was then in a state of very great suffering, and nearly exhausted; his breathing was intensely laborious, with stridulous noise, inability to swallow, and countenance expressive of most intolerable anxiety. Before I saw him, a probang had been used, which rather increased his sufferings. On a careful examination, it appeared to me that the bit was in the larynx. I, therefore, proceeded to make an opening into the cricothyroid space; and having introduced the point of a small silver catheter, with a little management suceeded in pushing the morsel into his mouth; immediate relief was the consequence. I advised him to remain very quiet for a few days; and as it happened to be at night, he did stay quiet until morning, when, finding no inconvenience, he would submit no longer to confinement. Four or five days after, he showed me the cut, quite healed, having walked upwards of ten miles on that day.

Now this case is a very simple one, and it would be nothing if a surgeon had any assistance; but where he is called on to act among a parcel of wild mountaineers (who only judge of a surgeon's proceedings by his success), and by candle light, in a poor cabin, *c'est une autre affaire.* The next case, however, is more interesting.

Case 2.—*Ejection of a Plum-stone from the Right Bronchus.*——Wilson, æt. 11 years, the son of a butcher in Kingstown, near Dublin, having a plum-stone which had a hole drilled through the middle of it to make what children call a birdcall, fixed between his teeth, while drawing in his breath, through the hole, drew the stone into the trachea. This occurred at Castledermot on the 15th of September, 1834, eight miles from my residence. I saw him on the 17th. A probang had been used, and he had been bled and had vomited. I found him in a state of the utmost suffering, his lips blue, his eyes protruding, and the thorax labouring. In fact, he was struggling in the most violent state of excitement. Yet he could swallow without great difficulty, and there was no emphysema. Having laid

him on a table, with a pillow under his neck, I proceeded to open the trachea, making my incision midway between the cricoid cartilage and top of the sternum; this operation on a child in such a state of excitement is by no means so easy as some who never performed it may imagine. The network of veins, the little arteries crossing, the dense fascia which connects the sterno hyoid muscle, which cannot be divided by the nail, and requires the knife, at least in the living subject; then those muscles becoming roused and rising up during the choking efforts of the child, showing a deep bloody cavity; then the same description of fascia between the sterno-thyroid; then the larynx quite small, and moveable and soft; and, lastly, the difficulty of entirely stopping hemorrhage before we open the trachea, make the proceeding rather a delicate one. Having divided five rings of the trachea I waited a few minutes, and then introduced a small silver catheter down the tube, and felt the foreign body lying at the bifurcation of the trachea, hoping to detach it, that it might be brought up by coughing; but it slipped towards the right bronchus and there remained. At this moment the child experienced great relief, and I thought it prudent to discontinue further pursuit. At that juncture, too, the peculiar chirping sound of the birdcall was perfectly audible, caused by the air rushing through the little foramen in the plum-stone, in its passage to and from the right lung. I did not leave any tube in the opening. I think that to do so is, in general, a bad plan. It is not only useless, but highly injurious.

The patient was now sent to his bed. He complained of a pain in the right side corresponding with the situation of the foreign body. Fever now set in, and he suffered occasionally severe attacks of dyspnœa. However, the inflammatory symptoms were kept down, but the chirping sound continued until the 24th, precisely a week subsequent to the operation, when, during a fit of coughing, he felt something at the wound in his neck, and putting up his hand, received the birdcall into it. The peculiar musical sound, of course, was discontinued and never returned. A profuse muco-purulent discharge and cough now harassed him for about a fortnight, succeeded by sweating; in fact, he became hectic, and I feared would sink. However, he rallied and was able to return to Kingstown, a journey of forty miles, at about the end of October. I have since heard that his health is tolerably good, and that the wound in the trachea, which was not larger than the whole in the plum-stone when he left this, and which I found very difficult to heal, is quite closed.

PHARMACEUTICAL PREPARATIONS.

1. *Antacid Lozenges.*—This prepartion may be made as follows:—Take 33 oz. 3½ dr. of pounded sugar; Sesquicarbonate of soda, 1 oz. 7½ dr.; Mucilage of gum-arabic, 5½ oz. Mix the sugar and the sesquicarbonate in a mortar, add the mucilage, which may be mixed with a little conserve of roses, oil of peppermint, or orange-flower water, and from the mass into a paste, which may be divided into oval lozenges, weighing about 14¾ grains. Each will contain about $\frac{8}{10}$ of a grain of sesquicarbonate of soda. (*Journ. de Chim. Med.* i. 66).

2. *Chloride of Zinc.*—Professor Hanké of Breslaw has employed salt successfully as a caustic in *fungus hematodes, malignant pustules, neviæ and syphilitic ulcers with a carcinomatous appearance.* He prefers it to corrosive sublimate, red precipitate, nitrate of silver, or arsenic. The latter he thinks ought never to be used. M. Canquoin recommends its application in cancerous diseases, in the form of a paste, consisting of two to four parts of flour, to one of chloride of zinc, brought to the proper consistence by means of water.

Muhrbeck has employed it with success internally, to the extent of from $\frac{1}{12}$ to I ½ gr. for the cure of periodical headache. Hanké has also used it in chorea, tic douloureux, epilepsy, dissolved in muriatic ether, (1 gr. chloride, 6 scs. ether) beginning with five drops every four hours. When taken in over-doses it produces nausea, vomiting, cold sweats, convulsions, It may be prepared by distilling one part of zinc with four parts of corrosive sublimate, or by evaporating to dryness a solution of zinc in muriatic acid. These differ in some respect, for the first, called *butter of zinc* is volatile, while the other is only so at a red heat. (*Journ. de Chim. Med.* i. 77.)

3. *Mercurial Ointment.*—M. Langlois, according to the suggestion of Chevallier, recommends the following process for making this ointment: He introduced 1 ⅓ lb. troy into a glass bottle, and poured upon it 7⅓ oz. of melted fat. He then placed the stopper in the bottle, and agitated the mixture until it became cold. It was then placed in warm water, and again liquified. While still soft, the mixture was poured into a marble mortar previously heated with warm water in order to retard the cooling. It was then triturated briskly for three quarters of an hour. No globules could then be observed. The same quantity of fat was added as at first, and the whole was triturated for an hour. The preparation of the ointment was now completed (*Journ. de Chim. Med.* i. 125.)

CURE OF ERYSIPELAS. Mr. WANSBROUGH of Fulham, in a note dated December 13th, informs us, that the application of the *Ung. Hyd. Fort.*, in cases of erysipelas, had been pursued in America some years. "My attention," Mr. W. adds, "was first directed to the subject about three years ago, by Dr. Gorry, M. D., of New York, who advised the treatment to a patient of mine, in a case of extensive erysipelas of the leg. When seen by Dr. G. the vesicles extended over the whole area of the inflamed surface. *One application* effectually cured the disease in twenty-four hours. I have been equally successful in every subsequent case. The *modus applicandi*, recommended by Dr. G., and practised by me since, is, to melt the ointment, and, with a feather to spread it, while warm, over the part affected, which was afterwards covered with dry lint, and the patient kept in bed.

CORRESPONDENCE.

DEFENCE OF THE JUDICIAL DEPARTMENT.—It may be said that as Mr. Hutchinson is before the public with his name, so ought all correspondents, when discussing the merits of his writings, to come forward with theirs. As a general rule this is correct; but there are exceptions to it. Few men will meet public functionaries of influence and power with their names, when opposed to them in opinion; and men who are the vindicators and champions of others naturally avoid being known. Our correspondent, who is anonymous, appears in vindication of a very honorable and upright body of men, and we think that it will be conceded even by Mr. Hutchinson himself that there is nothing in our correspondent's letter which is contrary to the rules of legitimate and liberal discussion.

To the Editor of the India Journal of Medical Science.

Sir,—Notwithstanding the review on Mr. Hutchinson's work "on the management of Jails" with which you have favoured your readers and your promise to continue it in the next number of the Journal, as my observations were partly penned before I received the number for this month, perhaps you will award them a place in your periodical.

Mr. Hutchinson divides his work into seven chapters, the first of which is entitled "Introductory Observations &c." contain ing almost in the on-set an attack of the gravest nature upon those who administer the civil branch of the service. I have not the honor to belong to that branch, but I will not flinch from saying that it is an attack as unjust as it is uncalled for. Mr. Hutchinson has I doubt not excited the feelings of a talented body of men, among whom there will be found some as willing, but much more able than I am to defend their characters from such aspersions. To them therefore will I leave him. Who would deny "that we have no right to inflict a single pang beyond that to which these unfortunate individuals (the convicts) have been sentenced by a competent tribunal." If Mr. H. means to assert that taking a man from the most miserable and precarious state of existence, from seeking his livelihood by *robbing, plunder,* and *crime,* sleeping by hedges and in ditches, and placing him in comfortable quarters, giving him a regular supply of food with clothing suitable to the changes of climate adds a pang to his suffering then is he correct, but any one who will take the trouble to inspect the Jails and Hospitals attached to them and impartially enquire into the mode of managing the prisoners, would soon be convinced, that while the ends of justice are upheld by punishment proportioned to the crime, every possible attention and care are bestowed upon the "unfortunate individuals." If Mr. Hutchinson could bring Society to that happy pass where there would be no sin, consequently no sorsow; no crime therefore no punishment, it would indeed be glorious; but while crime exists punishment must also be in force to stop its increase, and while justice ought ever to be tempered with mercy, yet it must likewise carry with it something to create terror.

The next five chapters may be taken together; I will pick out the 5th for a few remarks as it alludes both to the dieting and working of the prisoners. I think I will be able to set the author right on some points, and to shew he has taken an erroneous or at least a hurried position. He says that the place where they (the prisoners) work "is often at a considerable distance from the Jail, perhaps *one, two,* or even *three* miles." I pretend not to a knowledge on any of the subjects treated of equal to Mr. Hutchinson, but think I may venture to state, that when the daily work is at such a distance, the prisoners are *generally* encamped under Canvass, or Huts are erected for their accommodation close by; care being taken, in choosing the spot, both as to healthiness and a good supply of water, so that they are never brought home to Jail, neither is such hardship, or I may say cruelty, imposed as he would wish to represent. A suitable

Medical Establishment is also always in attendance. Following up to the above statement I have further to observe that with regard to the quantity of labour, if taken on an average, throughout the year, not more than half of what is performed by an ordinary husbandman is exacted from the convicts. It is seldom they have less than two hours for rest during the heat of the day. The natives are not in the habit of cooking in the forenoon, neither do the convicts desire it; they content themselves with a little dried food and a sleep, reserving their principal meal, as is customary, until the evening. The allowance granted them appears fully sufficient for the supply of *ordinary* diet, and the system of permitting them to purchase their own food is more congenial to their feelings, and seems to answer much better, than if they had rations served out. If prisoners were allowed as much as would enable them to procure all the stimuli, and condiments they have accustomed themselves to while leading an abandoned life, and could also save a little for their families, where would be the punishment? When sickness sends them into Hospital they are supplied according to the circumstances of the case. It is hard the innocent should suffer thro' the guilty, but are the sufferings of one man's family not likely to check crime in others. A Jail, particularly a criminal one, is not to be supposed to hold out attraction, the very look of it ought to create fear.

Mr. Hutchinson seems to have selected the most unfavourable reports from which to form his work, and has drawn largely from that of Dr. Kean, Moorshadabad, which certainly does the latter great credit. But it must be borne in mind that he is young in the service, enthusiastic, and zealous I have no doubt, still his opinion cannot carry that weight which would be attached to the opinions of those who have been half their lives in this country. Could not a report have been found amongst the immense number which must have been sent in which would have enabled Mr. Hutchinson to begin a paragraph "on the other hand &c." I write from no disappointment, I had not the honor to make a return. Granting Mr. Hutchinson the highest praise for his anxiety to ameliorate the condition of his fellow-creatures, I regret to say that the present edition of his work appears to me calculated to bring unmerited odium both upon our local and home Government if read by those unacquainted with the character of the natives and the subject. I pretend not to be a Howard, neither do I wish to be thought a Jeffries; but I consider that the Jails, Hospitals, and mode *of managing the convicts* reflect the greatest credit upon those whom I have the honor to serve; who with an ardent wish to uphold the character of the British name, while extending their protecting hand over the well disposed portion of their native subjects, convince them by a just administration of the laws, that they will not permit their being injured with impunity.

I hope the second edition which Mr. Hutchinson promises will be more ample in detail and parts of the present much qualified, but would it not be better for him under the sanction of Government to publish the Returns of the whole Medical Staff from which his present work has been compiled. To have entered more minutely into this subject would have encroached too much upon your generosity; as it is, an apology for the length of this communication is almost due from

Sir, your's obedie ntly,

12*th Sept.* 1835. QUI VIVVE.

MISCELLANEOUS.

ABSURDITY OF THE EXISTING POST OFFICE REGULATIONS.—It appears that our exposition of the absurdity of Post Office Regulations, by which we should be enabled to dispatch two numbers of our journal, containing eighty pages, at three annas less than we can now dispatch one of 50 pages, has awakened the Post Office Committee, and an alteration is in contemplation in the rate of postage on periodicals, which will now induce us to change our intention of supplying two numbers in 1836 which we had considered indispensably necessary to the fulfilment of the objects of this Journal.

The new Post Office Regulations, we understand, will enable us to send our Journal containing upwards of 50 pages to the most distant parts of India, at a lower charge than the present. We shall therefore, so soon as the regulation comes into operation, add ten pages to our journal, making them 52 without requiring any addition to our present rates of subscription.

This appears to be the best return we can make to our supporters for the cheering encouragement we have received in the augmentation of our list of Subscribers.

PHYSICAL SCIENCE.—That our Journal may not be confined to what some men would call mere medical science, we have illustrated Mr. MacCosh's valuable paper with a drawing of Gowalparah. We desire to enliven our pages with the collateral branches of Physical Science, and shall be happy to receive from our correspondents, besides topographical notices of various parts of India, drawings and maps of countries described, which add greatly to the interest afforded by accounts of the manners, customs, and habits of the people of India. In short so soon as the Government will be graciously pleased to take into consideration the great good to be derived from the general diffusion of Medical and Physical Science, by taking off the burthen of postage, we trust, we shall be enabled to increase still more the number of pages of our journal and fill them with subjects of scientific discoveries without putting our subscribers to any additional expence.

TO CORRESPONDENTS.

The following communications will appear in our next.

Mr. Evans' case of Fungus Hœmatodes of the Eye, with a drawing.

Professor Goodeve's on the Topography of Midnapore.

Mr. Hunter's of Queen's Royal Hospital, on Aneurism of the Aorta, Pectoral affections, and use of Ergot of Rye in retention of the placenta.

The cases of Bronchitis Acuta, Asthma, &c. shall appear in the succeeding number.

It is with great pleasure that we have to announce the enlistment of another able and talented correspondent Mr. Dunbar. His first exceedingly interesting communication on abscess in the right hypochondriac region shall have early attention.

We have also obtained from D. S. the first fruits, which are always precious. We mean the Clinical Reports of the General Hospital on the Autumnal Remittent Fever of Bengal. We cannot sufficiently express how obliged we are to our valued friend for this early proof of zeal in the cause of Science.

We beg to acknowledge the first and second communications of another able correspondent D. W——, being an interesting and instructive commentary on Mr. Hutchinson's work on the Medical Management of Indian Jails. We shall do our utmost to give this paper in our next.

We also beg to acknowledge our thanks to B——, for his paper on the Rupture of the Spleen, which if authenticated shall appear in our next.

Mr. Brett's detail of Surgical Operations, performed at Cawnpore during the current year, shall appear in our next.

We beg to acknowledge the second valuable communication from D. S.

The following work has been received for Review. Treatise on the manufacture of Saltpetre by John Stephenson. Our review of Malcolmson's work on Rheumatism in our next.

We have received a communication from our friend Mr. McCosh desiring us to expunge that part of his communication which alludes to the teeth of the Rhinoceros. The communication unfortunately came too late to enable us to comply with his wishes.

We rejoice to say that we have not sounded in vain. SCOTUS has responded, and our readers are to be again delighted with his fifth brilliant sketh of the Edinburgh Medical Professors.

We beg to acknowledge the favour of *Quis not Quiz's* communication, but unless authenticated we are compelled to decline its insertion. We have been favored with Dr. Mackinnon's communication: we shall value his promised new cases. Our object in pursuing the course he has kindly noticed is to arrest attention to valuable papers, which under the ennui engendered by the climate might otherwise be passed over. We have learnt that it requires great tact to catch the eye and the ear in India to scientific subjects.

☞ To avoid double postage and the disagreeable necessity of having their copies returned to us, we shall feel obliged if our subscibers will immediately on a change of residence inform us of their new address.

ERRATA TO THE XXII. No.

In our October number, in Mr. McCosh's paper, page 378, column 2, line 2, instead of *part of tract country* read tract of country; line 15, for *monument* read *monuments;* line 17, for *summit* read *summits;* line 47, after *leave* add *the;* page 379, column 1, line 29, for *moonya* read *moonga*, for *mooya* read *mooga;* column 2, line 11, after *conical* add *tops;* line 21, for *day* read *days;* line 25 for *alway* read *always;* page 380, column 1, line 54 for *Ganow's* read *Garrows;* line 56, for *They* read *The Garrows;* line 61, for *Ganow's* read *Garrow's.*

Mr. Evans's Case
of
Fungus Hæmatodes of the Eye.

Lithographed by T. Black. Asiatic Lith: Press. Calcutta.

THE INDIA
JOURNAL OF MEDICAL SCIENCE.

VOL. II.] DECEMBER 1, 1835. [No. XXIV.

ORIGINAL COMMUNICATIONS.

EVANS' CASE OF FUNGUS HŒMATODES.

To the Editor of the India Journal of Medical Science.

SIR,—In presenting you the accompanying Sketch, exhibiting a well defined Case of Fungus Hœmatodes of the Eye, I regret I have little to suggest or communicate in its recital serving to extend the boundaries of Surgical knowledge, by pointing out a curative mode of treatment for this truly horrible and generally speaking fatal disease, the nature and peculiarities of which have now long been known in Europe, and most ably described by Burns, Key, Wardrop, Lawrence, Langstaff, and other talented members of our profession.

From the very unfrequent occurrence of this malady in India many might be led to doubt even its existence in this our geographical range, and inwardly to exult in the consoling reflection, that amidst the desolating visitations of Cholera and other tropical diseases, which do occasionally thin our ranks, and commit sad havoc amongst us, we are at least secure and exempt from the attacks of one of the most formidable which the human frame is "heir to." Such indeed was the early impression I imbibed on my noviciate in this country, and it was not till 3 years had passed in this confident belief, while stationed in a largely populated (tho' widely scattered) Jungly District, in Central India, where I had the medical charge of a battalion of sepoys that I had an opportunity of correcting an opinion so hastily and delusively formed. I have now during a 15 year's residence in India witnessed several cases of this disease existing under nearly all the malignant forms and modifications that I have seen in England excepting perhaps in its degree of magnitude where it is often frightful to behold, almost surpassing belief, while here I do not think the tumours ever attain to that size, as death generally puts an earlier period to the patient's sufferings by closing his career. In one instance of this disease the patient a sepoy, where the tumour was about the size of a small melon and situated upon the upper and anterior aspect of the Tibia immediately below the knee-joint, I separated; and altho' I freely removed the surrounding integuments and even denuded the surface of the bone from whence the disease seemed to spring, to prevent the possibility of its recurrence, it rapidly shot forth again from the cicatrix of the wound, after it had promised well and had nearly healed. Its increase was now so alarming in spite of the most vigorous measures to repress it, that amputation of the limb was proposed as the only means of saving the life of the patient, but to this he could not be persuaded to consent, the Glands of the groin now took on the morbific action, and the man, worn out by long suffering, irritation, and exhaustion, died about five weeks from the date of the operation.

The Drawing represents a case of genuine medullary, or pulpy sarcoma, of what is generally denominated Fungus Hœmatodes of the Eye, for the cure of which unhappily there has yet been found no specific remedy. The subject was a poor village Hindoo woman, about 45 years of age, of spare habit of body and of a sickly lymphatic physical constitution. The fungous growth occupied the whole of the right orbit projected from its cavity externally to some extent and covered nearly the whole of the same side of the face, descending as low as the ala of the nose, which it slightly compressed, and turned a little to the left side, the excrescence was formed of irregular sized conglomerate nodules, with smooth shining surfaces (excepting when ulceration had taken place) from which points of grumous blood and a fetid sanious discharge constantly exuded.

The tumour examined by the taxis felt soft and conveyed that peculiar elastic springy sensation so characteristic of the true external fungoid disease: it was of a pale brownish red color, and, from what I could gather from the patient, it had been 2 years in attaining its growth. She stated that she was first afflicted with violent inflammation of the eyes, without any assignable cause—the cornea of right eye

then became opake, and a small discharge of matter escaped from the globe thro' the sclerotic coat near the inner canthus when a small fleshy exuberance shot forth, which daily increased till it arrived at the size represented in the Drawing. Less pain and inconvenience were complained of than the appearance and condition of the part would lead one to expect, and for the purpose of examination I was surprized to observe the rough manner with which she handled it. The vision of the left eye remained unimpaired. As I considered the disease had in this instance advanced too far, to admit the least chance of success from an operation; for, I had no doubt the Optic Nerve, Muscles, Coats of the Eye, and in all human probability some contiguous portion of the brain itself were impacted in the disease, I did not consider myself justified in proposing the extirpation of the diseased parts, particularly as I was in a part of the country where I could neither command assistance, nor conveniences for the proper performance of such an operation; the poor miserable creature was consequently abandoned to her fate, and as I left the district very soon after my first and only interview with her, I am unable to state the sequela of her "sad eventful history" tho' I have no doubt she very soon died.

The obscurity which unfortunately involves the early stages of these tumours prevents the possibility of our forming a correct prognosis as to the nature of the malignant tendency of their dispositions whereby many are allowed to progress on till an operation affords but a slender hope of success; for by this time the constitution has taken the alarm, and the diseased action in having become firmly established has in all probability extended its baneful influence to other parts of the body, for in the Post Mortem examination of patients who during their life-time have undergone operations for the removal of external hœmatodic tumours I have on several occasions seen the lungs, liver, spleen, kidneys, and the mesentery more or less affected either with tubera diffusa, medullary sarcoma, or the true fungoid structure itself; and from the circumstance of these apparently different diseases being often found together in the same individual, I think, I am warranted in considering them as identical, only occupying different textures or tissues of the animal frame: in short that they are but modifications of one and the same disease.

An analogous case to the one just cited, illustrated by a coloured engraving, is recorded in Saunders' Treatise on the Diseases of the Eye. The progress of the disorder from its commencement to the total disorganisation of the eye and the protrusion of the fungus—to the extent exhibited in that patient, also a female and past the meridian of life, accords in its principal features with the one I have here imperfectly attempted to describe, only that the time it took to acquire its full extent of growth and malignancy was 7 years, whereas in this case, 2 short years were sufficient to produce an equally inveterate and destructive disease.

TOPOGRAPHY OF MIDNAPORE.

To the Editor of the India Journal of Medical Science.

DEAR SIR,—The accompanying Sketch of the Topography of Midnapore was written at the request of the late Governor General when his Lordship had it in contemplation to locate European troops at that station. It is I fear a very imperfect account, but if it is worthy of a place in your Journal you will oblige me by inserting it.

Your's faithfully,

W. H. GOODEVE.

Calcutta, Sept. 9th, 1835.

The civil station of Midnapore, the principal town of the zillah of that name, is distant from Calcutta about 70 miles in a south westerly direction and about 45 from the nearest part of the Bay of Bengal. It is placed upon a considerable elevation of table land upwards of a hundred feet above the level of the river and in some spots nearly a hundred and fifty.

This elevation consists of a mass of lime-stone rock, mixed with a large proportion of iron called by the natives conka, and is apparently an off shoot from the large tract of irony lime-stone formation which extends for some hundreds of miles in a westerly direction through the hilly tract of Chota Nagpore, Palamow, &c. This rock in the more elevated spots is quite bare, though in other situations it is covered with a rich productive soil. The latter is very shallow, however, insomuch that the large trees with difficulty find root in it and are compelled to seek support by spreading their foundations laterally; in many cases the fibres of the largest Pepul cannot penetrate more than a foot into the ground in a perpendicular direction.

On the EAST this rock rises gradually and imperceptibly from the flat country, but on the south it terminates more abruptly having a narrow slip of cultivated land varying from a quarter of a mile to a mile in

breadth between it and the Cossye river, which chiefly bounds it on that side. On the west and north it is lost in undulating ground, covered with dwarf trees the commencement of the large tract of Jungle which stretches into Nagpore in one direction and almost to the foot of the Rajmahl Hills in another.

The most elevated parts of the station are the Parade Ground, which is a large plain on the north of the Seapoy lines about a mile and a half long and a mile wide, and another plain of nearly the same dimensions situated on the western extremity of the station. The surface of the latter is more barren and more irregular than that of the former, but it commands an uninterrupted view to the southward whereas the other is more confined. There is a small tank of good water about 300 yards to the southward of this plain, which dries in the hot weather, but which might easily be deepened, and doubtless water could be procured in the neighbourhood by boring, as wells are plentiful in every direction throughout the station. These plains are about two miles distant from each other.

The rest of the station consists of undulating ground of nearly the same character with that of the plains, but in the centre of the place there is a jheel, which drains through a narrow tract of rice fields, into a dirty channel, and which after running through the native town terminates in the river. Some years since a plan was prepared by Mr. Dick the Magistrate to dry up this spot; and it was approved by the Government, but no further steps have been taken to carry it into execution. It would be a most feasible and not a very expensive operation to drain this marsh, and would contribute greatly to improve the purity of the air arouud it.

The water found in the tanks and wells is generally much impregnated with iron.

The station is a largé one, and though at present there is only one native Regiment there are bells of arms for two corps. Houses are plentiful, and all the materials for building and labor very cheap. Grain is rather dear, but other provisions are very reasonable.

The gardens produce every species of vegetable in great profusion, but since the destruction caused by the late storms fruit is scarcely to be obtained.

The communication with Calcutta is of course easy, the distance being so small; but the river is open only in the rains and then not to be relied on, as it is dependent upon the mountain streams for supply, and consequently varies greatly in the quantity of water. Boats are thus frequently delayed for a week together and sometimes take a month to accomplish the journey from Calcutta, which, if no stoppage occurs, is easily performed in eight days.

There are three *land* routes to the Presidency, one by Keerpoy into the Benares road, making a distance of about 100 miles; a second by Ooloobareah, which is 51 miles from Midnapore on the banks of the Hoogley, and distant by water 25 miles from Fort William, the land journey from the opposite bank by Budge Budge being 13 miles; and a third by Tumlook, which is 36 miles from Midnapore and fifty by water from Fort William. There is no land route from this latter place to Calcutta.

These routes are practicable throughout the year; but the late inundation has destroyed a considerable portion of the Ooloobareah road and has much injured the Tumlook road at one or two points.*

With regard to the comparative advantages of these routes, the Keerpoy road is long, and the halting places bad, but there are no rivers to cross, whereas on the Ooloobareah road there are five, viz.—the Cossye twice, the Roopnarain, the Damoodah, and the Ganges, the three latter being very broad. By the Tamlook road the Cossye is twice crossed, but at the second crossing at Pauchkoorah Ghaut the river is not more than a hundred yards wide though very deep, and a bridge might easily be thrown over it. For dák journeying the Ooloobareah road is the best, but for the passage of troops and supplies the Tumlook route is most desirable: the land journey is short, the halting places good, and a steamer could run between the last stage and Calcutta in six hours. If the latter road were made *pucka* it would of course much improve it, and the cunkur of Midnapore makes the finest roads in the world.

The climate of Midnapore is remarkably salubrious, resembling more that of the upper provinces than Bengal, indeed the whole external appearance of the station reminds one of the up country cantonments rather than a place within 50 miles of the mouth of the Hooghly. The peculiar dryness of the air, at all times of the year, is very striking; but its purity and elasticity are most observable in the rainy season when compared with the close moist atmosphere of the surrounding country, and especially of Calcutta and its neighbourhood. The quantity of rain which actually falls, and the period of its continuance, do not differ from the usual proportion in the rest of

*This was written last year; but I believe the damage has since been repaired.

Bengal; but the nature of the soil which receives the water materially influences its effect upon the air. On the hard rocky ground of Midnapore the rain never lays; and after the most violent and continued storms the plains become perfectly dry in a few hours so that the roads will not wet the soles of the traveller's shoes.

During the rains the thermometer varies from 80 to 90, sometimes it is as low as 75 degrees. The cold season is not remarkable either for its continuance or severity: it does not last above three months, and the thermometer is seldom, even at daybreak, below 50, though occasionally it has been known to fall as low as 40°. During the day it ranges between 60 and 70. On the high ground the cold weather fogs are almost unknown and even in the lower parts of the station they are rare, and the air, unlike the damp raw cold of Calcutta, is always fresh and bracing.

During the hot season the temperature, as indicated by the thermometer, is not greater than that of the surrounding country, ranging usually from 95° to 100° in the shade, rarely attaining to 110°, but the hot winds blow strongly, and out of doors the rocky ground reflects the sun with great force. The greatest heat does not last above six weeks at the outside, and rarely more than a month if the rains fall early; but during the whole of the S. W. Monsoon a strong sea breeze renders the nights delightfully cool and refreshing.

In common with the neighbouring country Midnapore has been lately visited with frequent hurricanes, and from its exposed situation great destruction has been caused by them; but in the ordinary course storms are not more frequent here, than elsewhere; it must be observed however, that many accidents from lightning have occurred in certain parts of the station, the electric fluid being of course readily attracted by the great quantity of iron in the soil.

We may naturally expect this climate to be more than usually healthy, and as far as Europeans are concerned it is strikingly so. But little malaria can be generated on such a soil, and consequently remittent and intermittent fevers are almost unknown, though of course many cases of the latter are found, which have been brought by the patients from some other district, and several of these have derived great benefit from the dry air of the station. In comparison with most other places in the low country dysentery is a very rare disease at Midnapore.

The diseases to which a European constitution is most liable are, as in all other rocky tropical soils, inflammation of the viscera and plethora; but in referring to the mortality of the last ten years, I find that in a population averaging forty Europeans only one fatal case of hepatitis has occurred; six adults and three infants being the total number of deaths which have happened amongst the European inhabitants during the whole of that period, with the exception of the officers of the 38th Regt. N. I. who were brought from the Bomaughattea jungles in a dying state and whose deaths of course have nothing to do with the Midnapore climate.

The station does not appear equally salubrious for the natives, as the proportion of sickness and death is almost as great amongst them as in any other part of Bengal, though they themselves think highly of the climate. Indeed the mortality in the Jail Hospital has at times even exceeded that of most other neighbouring stations: the peculiarity of their mode of living, their general habits, and the fact that the native population inhabit all the confined low damp spots which can be found in the place, appear to me sufficient to account for this difference. The Native regiment, which is at present stationed here, has had a large proportion of sick, but it suffered severely during two campaigns in the Cole country, and the sick are chiefly the old invalids who were affected in these campaigns. The most prevalent diseases amongst the natives are, as usual, fever, dysentery, and diarrhœa; and for some years a species of Hospital Gangrene in the shape of severe sloughing ulcers has at times visited the Jail and latterly the Military Hospital.

Midnapore cannot of course be looked on as a sanatarium; but the superiority of its climate over that of the surrounding country would make it perhaps a desirable place for invalids to resort to, who require merely a temporary change of air to a better climate than Calcutta and its neighbourhood can afford them, and its vicinity to the Presidency makes it easily available for such a purpose.

Considered as a residence for Europeans it is certainly far preferable to any Bengal climate with which I am acquainted within a moderate distance from Calcutta. Intemperate habits would doubtless suffer more here than in the rice fields, from liver and determination of blood to the head, but they would be comparatively free from many other equally fatal disorders, and the dry invigorating air would be very beneficial to the constitutions of those who have been exhausted by frequent fevers and dysenteries.

These remarks have been drawn from observation upon Europeans of the better classes, whose habits are careful and tempe-

rate, but I have since learnt that about 18 years ago a Squadron of European cavalry were quartered at Midnapore for some time, and that cerebral affections, which prove extremely fatal, were prevalent amongst them to a great extent. This may be attributed perhaps to their intemperate habits accompanied by exposure to sudden changes of temperature in the careless fashion which European soldiers indulge in; but it is an important fact with reference to Midnapore being ever made a station for English troops, and would require more than ordinary precautions to be adopted in regulating their mode of living &c.

W. H. GOODEVE.

Calcutta. Sept. 20, 1835.

HOSPITAL REPORTS.

HOSPITAL PRACTICE IN THE HOSPITAL OF THE 2ND OR QUEEN'S ROYAL REGIMENT, BY MR. HUNTER.

——Aneurism of the Aorta——

P. Cunningham, æt 30, admitted 18th February 1835. Pain in left chest, dyspnœa and cough,—Expectoration scanty and pituitous—Apyrexa, Pulse 88, full and soft. Respiration high anteriorly. Low sibilous rale under left clavicle. V. S. ad ℥x &c. &c.

19th Much relieved, Pulse 80, soft. Respiration high and bronchial under both clavicles. Puerile in left subscapular region. Obscure in right, occasionally with thin mucus rale. Percussion, no result.

Diagnosis: Dry Catarrh (Laennec) Again bled to 12 oz. on the 22d, and transferred to convalescent ward, on the 2d of March; respiration nearly natural and pain gone.

April 8th. Re-admitted from convalescent ward. Pain under upper portion of sternum, dyspnœa, and cough. Apyrexia; pulse 76, moderate. Respiration high over all the Chest. Heart's sounds, impulse and rhythen natural.

10th.—Dyspnœa urgent all night, obliging him to sit up in bed. No expectoration; pulse 70, moderate. V. S. &c. &c.

12th. Relieved by the bleeding. Dyspnœa again urgent. Only easy when sitting up in bed, with his head and shoulders bent forward. Cough with scanty pituitous expectoration. Pulse 92, moderate.

May 2d. Stuffing under upper portion of sternum, and rattling in his throat. Respiration over the part sonorous, but without rale. Apyrexia; pulse 68.

8th. Tolerably well. Transferred to convalescent ward, and to be invalided.

June 27th. Re-admitted. Sits up in bed, but dyspnœa not very urgent. Pulse 60, weak. Respiration sonorous in right subscapular and interscapular regions; elsewhere, scarcely audible. Rattling in throat distinct to by-standers.

28th. Dyspnœa very urgent all night. Respiratory muscles in strong action. Loud sonorous respiration over lower portion of trachea, like the prolonged sound of a steam engine. The chest as yesterday.

Diagnosis: Contraction of lower portion of trachea from thickening of its lining membrane (Tracheates). July 2d. Is obliged constantly to sit up. Pain in left shoulder in the night. Tolerably easy during the day. Apyrexia. Pulse 80, moderate. Sonorous respiration confined to trachea. Respiratory muscles in strong action. Murmur in chest very indistinct.

5th. Respiration high and clear over all the chest anteriorly. Over trachea highly sonorous. Heart's pulsations weak.

Diagnosis: Heart and lungs healthy. Disease confined to trachea and perhaps large bronchi.

12th Soreness betwixt his shoulders; dyspnœa and rattling in his throat; Pulse 88, moderate.

17th. Pain under left nipple. Thinks but for that, he could now lie down. V. S. ad ℥vi &c. &c.

18th. Blood cupped and sizy. Pain removed. Respiratory murmur only very partially heard in chest since 5th Inst. tho' both abdominal and thoracic muscles have always been in powerful action; sonorous (Engine) respiration over lower portion of trachea. Pulse 92, small.

21st. Became rather suddenly worse towards morning. Now sitting up, his head and shoulders bent forward, scarcely able to breathe. Lips pale, surface cold. Pulse 80, occasionally indistinct———Died at 1 P. M.——Marked in a note previous to examination. 'Suffocation from contraction of lower portion of trachea, from thickening of its lining membrane, or the pressure of a tumor from without'——Autopsy. True aneurism of Aorta (right side) from immediately above valves to beyond origin of Innominata. False sacculated aneurism from this, of the size of two oranges placed together, ascending behind sternum and impacted betwixt upper portion of that bone and trachea. Heart and lungs perfectly healthy, as were all the bronchial tubes, and trachea, except a greater degree of redness at the part on which the aneurism was resting.

REMARKS.

Where was the aneurismal sound and impulse! No doubt under the upper portion of sternum; but we were too easily satisfied, and perhaps as his chest was very

thinly covered, were contented with applying the stethoscope over the softer parts, where it was more easily adjusted. The stethoscopic signs &c., indicated obstruction to the free entrance of air into the lungs and the expectoration, tho' scanty, was that of bronchitis, consequently bronchitis, and the obstruction caused by congestion or thickening of the bronchial membrane. We quite forgot the snoring and sibilous rales of bronchitis, but then this was the *dry* catarrh of Laennec, never thinking these depended on this very state. Had there been a free secretion, we should also have had the mucus rale. The low sibilous rale under left clavicle, and the thin mucus in right chest at first assisted in leading us astray, but we ought to have seen they were too insignificant. They are now easily accounted for. Afterwards when called to the immediate seat of the disease, nothing but the previous impression could have prevented the detection of aneurism, but with bronchitis on our minds, what was more possible than the disease to have more particularly affected the trachea and large bronchi. Even the clear respiratory murmur on the 5th July did not surprise us, for the disease had already been marked, trachitis. Its sudden appearance and disappearance might have convinced us that the obstruction could not have been of any permanent nature. Pressure of a tumor was ultimately suspected, but whether then an original or only revived idea, it would be now difficult to say. Aneurism we never dreamed of till just prior to the post-mortem examination, and then only as a possibility. It is evident, however, the most correct diagnosis could not have materially affected the result, and therefore it is a cheap as well as valuable lesson. It would be well perhaps to trace the course of the aorta in all pectoral affections, tho' it must be confessed a regimental medical officer cannot always give such a degree of attention to minor cases.

PECTORAL DISEASE.

John Carty, æt. 31, 10 years in India. 16th June 1835. Has been frequently in Hospital with pectoral symptoms for a year past. Lost his voice in January last, and has never since recovered it. Admitted on the 2d instant with pain and stuffing in his chest, the former particularly in left side extending to left shoulder, dyspnœa and cough with some expectoration of phlegm. These symptoms, tho' again considerably relieved, are by no means removed. Speaks in a kind of croaking whisper. Apyrexia. Pulse 76, equal at both wrists. Sleeps badly. Decubitus on back, lying on right side causes dragging sensation in the left chest; and lying on left increases the pain of that shoulder. *Physical Signs.* Left 2nd, 3rd, and 4th cartilages curved downwards and more prominent than right, Chest resonant except over lower thirds of sternum (Perhaps some deficiency also in left subclavian, region, tho' not very evident).

Respiration louder (distressed) over all left chest anteriorly, even in cardiac region, than in right. Somewhat sonorous under clavicle, but without rale. Heart's sounds, and Rhythen natural. Sounds very distinct in right subclavian region. Diastole audible in left, but systole marked by bellows murmur. Bellows murmur also audible above left clavicle; in axilla, and in lower part of left interscapular region, but at present nearly confined to these. Impulse evident under clavicle near sternal junction, greater than in any part of cardiac region, but I think more appreciable without the stopper.

Diagnosis. Sacculated aneurism of aorta, compressing the left lung and bronchi, and throwing the heart to the right of its natural situation.

Prognosis. Most probably sudden death. Time very uncertain. Within 12 months.

REMARKS.

Here we have the signs, which we overlooked in the last. But for these, all we could have said, would have been that there was disordered function of left lung; or from the general symptoms, we would have termed the disease, pneumonia, knowing nothing of the matter. With the aneurismal sound and impulse, however, the history of the case, the loss of voice, the distressed respiration of left lung with permeable state of both, and the situation of heart are easily explained; and instead of now creating difficulty, all tend to confirm the diagnosis.

JAMES HARRIS'S CASE.

J. Harris, (the case given in our last) died 22nd July. The following is a brief abstract of the appearances found on dissection——Great emaciation. Upper surfaces of right lung adhering to parietes of chest, and its whole substance converted into a mass of corruption by tubercles in their various stages of softening. Also several cavities. Tuberculous degeneration of middle, and lower lobes of right and upper lobe of left lung; also commencing in upper portion of lower lobe. Heart, as a matter of course, small and attennated.

ON THE RETENTION OF THE PLACENTA.

Having lately observed in your valuable Journal, one or two notices of the successful use of Ergot of Rye in retention of the placenta, and impressed with a sense of the danger of trusting to medicine where the retention has been of much more than an hour's continuance, or where any untoward symptom is present, I am induced to subjoin the fol-

lowing, to bring the more efficient means conspicuously into view.

B. C.—ætat 28, the mother of several children. Had a miscarriage in the fourth month, three days previous to admission; brought to Hospital at 9 A. M. in an almost continual state of syncope from uterine hemorrhage, supposed owing to retention of the placenta, that not having been positively ascertained to have come away, tho' the cord had the first night. An Enema of 2 oz. of gruel and a drachm of laudanum having been administered, I immediately commenced to open the os uteri, by first insinuating one finger, then two and so on gradually dilating it from within outwards, and occasionally resting to imitate natural pains. From the exhausted state of the patient, the dilatation was soon accomplished, and the placenta laid hold of, but still it could not be brought away till the hand was introduced, when a small portion of it was found grasped by a contraction in the fundus uteri. Into this contraction, the fore-finger was insinuated, and the placenta liberated by drawing the finger two or three times firmly along its surface. The fingers were then moved gently round the womb, till it firmly contracted, expelling its contents. Scarcely any blood was lost during the operation, perhaps partly owing to the exhausted state of the patient, but I think chiefly to the permanent stimulus of the fingers. It was such an extreme case, that I think but for Mr. Wilkins of H. M. 4th Light Dragoons (then acting surgeon of the Regiment), I should not have had courage to have gone on with it. Just before the hand was introduced, she was for some seconds supposed actually dead. It is unnecessary to add, we had to make liberal use of spirits &c. both during the operation and for several hours after. In the evening, however, the pulse had become quite distinct, and she afterwards recovered without a single unfavourable symptom. When on this subject, I may mention we had a case where the placenta was expelled before the fœtus, but knowing it was not the first instance of the kind, I kept no notes of it. If I recollect right, she had uterine hemorrhage for some days previous, but not alarming till the morning of admission.

I may also mention, I have tried the stethoscope in three cases of pregnancy One in the 6th month, and the others in the 8th and 9th respectively. In all, the sounds of the heart and placental arteries were very distinct. In the first, the sound of the heart exactly resembled the fast ticking of a watch, and seemed as it were to rise sometimes close to the ear, and then again sink to a distance.

In the others, the sound was softer, more distinctly double, and fixed. In the 1st the pulse was at 140; in the 2nd 136, and the 3rd 144, more easily numbered than the pulse at the wrist. The impulse of the child too was very distinct at times, and by no means agreeable to the ear, when listening for a low and distant sound. I have no doubt, Mr. Editor, you will agree with me in saying, were it for pregnancy alone, the value of the stethoscope is incalculable.

GENERAL HOSPITAL CALCUTTA.

CLINICAL REPORTS—CASE I.

Autumnal Remittent Fever of Bengal.

James Hewett, æt. 27, private H. M. 49th Regt. was admitted into the General Hospital at 10 A. M. 26th September 1835. It is stated that he arrived in Calcutta four days ago, having purchased his discharge and marched down from Hazaribagh on foot in fifteen days. During the last eight days of his journey the weather was very wet and stormy, he walked the whole day, and was much exposed. Notwithstanding his fatigue, he did not consider himself unwell and has been going about on business for the last three days in town.

This morning he complained of feeling sick at stomach, of violent pains in the loins and limbs, and of headache.

There is now pungent heat of surface, violent headach, much thirst, a deep yellow suffusion of the conjunctivæ, and skin of the face, a dry white tongue, pulse 99. Bowels have been confined for two days. He never had any previous illness during seven years' residence.

V. S. ad unc. xx. Shave the head and administer an Enema domestic without delay. R. Calomel gr. x. Ant. Tart. gr. i. Ext. colocynth gr. xv. immediately.

6 P. M. He was much relieved by the bleeding: the blood is cupped and buffy; perspired towards the afternoon; bowels once moved by the Enema, headache is not gone. No uneasiness of thorax or abdomen. p. 80. soft. skin moist and cool. Apply xviii leeches to the nape.

R. Calomel gr viij Ant. Tart. gr ½ Ext. Colocynth C. gr xv. at bed time.

27th 6 A. M. Had scarcely any sleep. makes no complaint of head but the forehead and scalp are very hot, while the surface generally is cool. P. 80, no thirst; tongue dry and white, no tenderness of epigastre on pressure; bowels once scantily moved.

Apply xxiv leeches to the temples. R. P. Jalap C. ℈iv. immediately.

6. P. M. Has had 6 or 7 very offensive

dark feculent evacuations in the afternoon, the last are watery and acid; the urine is scanty and high colored.

A paroxysm of fever came on at 8½ A. M. without shivering, the leeches were applied; at the moment. He began to perspire at noon and the skin is now covered with moisture, the eyes are heavy and suffused but he feels his head lighter, some tenderness and fulness at Epigastre. Repeat the pills as last night.

28th 6 A. M. Passed a restless feverish night, became easier and quieter towards morning, his mind is a good deal confused, tongue covered with a dry yellow coating of mucus, has had 3 yellow and frothy stools. The skin is cool; pulse moderate.

R. Calomel gr. i; Ant. Tart. gr. ⅛ Pulv. Cret. comp. gr. iij to be taken every hour.

At the accession of the febrile paroxysm apply xvi leeches to the head and xii to the epigastre.

Give P. Jalap C. ℥i. at 11 A. M.

6. P. M. Severe paroxysm came on at 9 A. M.; he was quite delirious for two hours, is now slowly recovering his senses, perspiring profusely, the eyes are dull and heavy, the skin quite yellow; tongue loaded with brown fur in the centre, has had several black, oily stools.

R. Calomel ℈i. per se.

Blister to the nape.

29th. 6. A. M. He slept composedly for some hours after the calomel but was feverish and restless about 10 P. M. when P. Jalap. C. ℥i. with Ant. Tart. gr. i. were given and the head cooled assiduously by cold water; several pitchy stools this morning. Tongue exhibits a perfectly black crust in the centre, the lips and teeth are sordid: There is however a complete remission of fever; P. 84. soft, and no headache at present.

R. Quinin. Sulph. gr. iv.

Magnes. Sulph ℥ij.

Acid. Sulph. Dil gtt. vi.

Infus. Sennæ ℥iss,—to be taken immediately, and at 7 A. M.

Rub in ℥i. of Blue ointment to each thigh, and apply a large mustard sinapism to the epigastre.

4 P. M The Fever did not come on till 2. P. M. previous to which he had several green watery stools. He is now quite insensible, there is extreme restlessness and jactitation, respiration hurried and laborious, face much flushed, surface hot, thirst urgent.

xvi leeches to the temples, viii to epigastre

R. Vin. antimonial. gtt. xxx. in solutio potass. sup. tart. ℥ij every half hour.

8. P. M. Perspiring, more sensible, great prostration and sighing. P. 108, small; has passed several green watery stools in bed.

R. calomel ℈i

Ipecacuan. gr. ij.

Camphor gr. ij

Ext. Hyoscia gr. iv.

Repeat the friction with blue ointment.

30th Sept. at 4 A. M. this morning there being a perfect remission, after a somewhat better night he took the quinine, salts, and senna as yesterday, and repeated them at 6 A. M. These have not yet (6 A. M.) operated, but he is cool and composed; the pulse is soft, 84; tongue covered with a black crust in the centre; but its edges are red and moist, and a white margin appears, as if the crust was about to be cast off.

Repeat the senna, salts, and quinine at 7. A. M.

Give 2 grains of quinine by itself at, 8, 9, and 10 A. M.

Continue the mercurial unction night and morning,

6. P M. had a slight paroxysm at 2 P. M. which lasted till 4 P. M.; has been freely purged, the evacuation a bright green fluid.

Repeat the quinine 2 grains now and at 7 P. M.

R. Pil. hydrarg. gr. x.

Ant. Tart. gr. ½

Ext. colocynth comp. gr. x v. at bed time.

Oct. 1 6 A. M.—He is very low this morning, incoherent, and sluggish in answering questions, eyes sunk and heavy, the yellowness of conjunctivæ has quite disappeared, the tongue is moister and whiter. Skin cool; P. 102, bowels free, evacuations the same. Blister spine with Liquor Lyttæ, continue the mercurial unction and

R. Quinin. sulph. gr. ij.

Mist. camph. ℥s. to be taken now and at 7. 8. 9. A. M.

6. P. M.—Had a short imperfect paroxysm at 2 P. M, after its subsidence has been much purged and he is now greatly exhausted, a cold clammy sweat on the surface but the intellect is clear. Repeat the quinine with camphor 3 times this evening and give

R. Pil. hydrarg. gr. vi.

Ipecacuan. gr i.

Opii. gr. i. at bed time.

Oct. 2. 6 A. M—Slept well and refreshingly; feels much better this morning; gums are red and swollen; tongue cleaner.

R. P. Jalap. C. ℥is.

Quinine gr. ij. with camphor mixture 4 times before noon.

6 P. M.—Has had no fever to-day: stools brown fluid with feculent sediment: urine copious and limpid: Repeat the pills.

Oct 3.—Slept well; free from fever. Repeat the Jalap and Quinine.

Omit the pills from this date until the 20th; continued to improve; the bowels were kept open by

R. Magnes. Sulph. ℥i.
Magnes. Carbon. ℥ss.
Infus. gentian ℥iss.
Tinct. Cinchon. ℥ij.

Every morning, and the diet very gradually increased.

Remark.

1st, the latent period between exposure to the poison and supervention of its specific effects. 2nd, the well marked characteristics of the particular fever, peculiar I suspect to Bengal, and so admirably drawn by Mr. Twining. 3rd, the intensity of the conjestion round the great centres during the paroxysm, without inflammation. 4, the completeness of the remission, when due depletion has been practised during the paroxysm. 5, the risk of collapse from purging at the decline of a paroxysm. 6, the compatibility of quinine with other medicines for different purposes. 7, the necessity of calomel and brisk purgatives, until healthy secretions are procured. 8, the absurdity of *pushing* the mercurial treatment beyond this point

Query.—What are the specific agents which determine the types of Fever?

Case II. Partial Paralysis.

J. Richardson, private, H. M. 9th a stout healthy looking man, æt 29. was admitted into the General Hospital 8th October. He had been drinking too much the day before, and slept all night in barracks near an open window. On awaking this morning found the extremities of his left side stiff and numb, and cold; he retains perfect command of them, but is not sensible of any stimulus applied to them: The right leg particularly has no sensation whatever, and is very decidedly colder than the other; the numbness follows the course of the sciatic nerve, and pressure, made with the point of the finger over the sciatic notch, causes sharp pain all along the nerve to the toes.

R. Calomel gr. viii.
Ant. Tart. gr. i.
Ext. colocynth gr. xv. now
and P. Jalap. C. ℥iv. after 5 hours.

9th. Has been freely purged and had a warm bath this morning. He has recovered the feeling of the arm. Tongue is furred.

P. Jalap. C. ℥i
Antim. Tart. gr. ½

10th. The numbness in now confined to the popliteal and peroneal nerves following their course so exactly that he traces accurately the distribution of the latter on the calf, instep, and toes: the sole of the foot and calf of the leg deriving chiefly from the tibial nerves are not at all affected: a hand applied to the limb is immediately sensible of the difference of temperature which is not less than several degrees between these parts: he bears pricking with a pin and pinching over the affected parts without the least perception. The *anæsthesia* is quite distinct, and not coupled with the least defect of voluntary motion.

Repeat the purgative of Jalap, and antimony daily; a warm bath at bed time.

R. Ol. olivar ℥iiss
Ol. Terebinth ℥iss.
Acid Sulph. ℥i.

To be used assiduously in embrocation along the course of the nerve.

11th, 12th, 13th, 14th, Continued to improve.

17th. Discharged quite well.

Remarks.

It is from cases such as this, sufficiently common, that the best confirmation of the theory of the double origin with distinct functions of the nerves is obtained. The difference of temperature in this case was very remarkable. It may be disputed whether the condition of retarded circulation in the limb, indicated by the diminished heat, may have been the cause of the diminished sense of feeling, or vice versa. The insensibility following so minutely the course of the nerve, however, which does not correspond with that of the blood vessels, inclines me to ascribe to the pathological condition of the former the affection of the circulation. That no organic cause existed was sufficiently evident from the success of the treatment which were simply free purgatives, antimonials, and external stimulant frictions.

BRETT'S CASES OF BLINDNESS &c.

The following is a continuation of the valuable tabular statement of cases of blindness &c. treated by Mr. Brett, which we gave in our Journal for April last. The labours of Mr. Brett, in the cause of humanity, are highly creditable to him. They point out how much good can be done to the vast population of this country by a scientific and zealous medical practitioner who would take the trouble of making his abilities known to the people. We strongly recommended the praiseworthy example of Mr. Brett to all who have the means of following it.

SURGICAL OPERATIONS FOR THE YEAR 1835—IN CONTINUATION FROM NO 50 TO 84 INCLUSIVE, AT CAWNPORE.

No.	Dates 1835.		Names and caste.	Residence.	Age.	Constitution.	State and nature of disease and prognosis.	Duration.	Nature of operation.	Result and Remarks
50	Jan.	15	Nuttoon Moosulmaun	Poora	40	Feeble	Capsulo-lenticular cataract subject to pains of head.	2 yrs.	Depression with curved needle of right.	Successful.
51	,,	,,	Sobha Sonar	,,	60	Do.	Lentic : Cat. left an aridsiliguase cataract from a wound of a sharp instrument, with a correspondent cicatrix of Cornea.	6 ms.	Do. Do. of right	Successful.
52	,,	,,	Khoshal D,hoonna	,,	50	Good.	Lenticular Cataracts.	5 ms.	Do. of right	Successful.
53	,,	,,	Boondea Bhutteara	,,	70	Very infirm	Capsulo-lenticular.	4 ys.	Do. of right	Successful.
54	,,	,,	Munsook Hujjam	,,	50	Moderate.	Lenticular Cataract.	1 yr.	Do. of left	Successful.
55	,,	,,	Mauttroo Aheer	,,	50	Do.	Capsulo lenticular Do.	1 ,,	Do. right	
56	,,	,,	Rasee Durzee	,, (Madarie)	60	Feeble	Do. Do. Do.	1 ,,	Do. left	These 3 patients have never been seen since although every enquiry has been made for them.
57	,,	,,	Pem Sing Thakoor	Near Chowbegpoor	65	Good	Lenticular Cataracts	1 ,,	Do. left	
58	,,	20	Munguleea Chumarr	Cawnpore	18	Stout	Dense opacities of both Cornea from violent inflammation : prognosis unfavourabe.	4 Ms.	Operation for artificial pupil at external inferior portion of right.	The operation was undertaken to give him a chance. He is reported to have been restored to sight, and at work.
59	,,	20	Shumsheer Khan	Cawnpore	50	Good	Right eye conched by a native "Scitteea" left a capsulo-lenticular : catt. rather unfavorable.	3 ys.	Division with a sharp pointed needle of left.	Absorption progressing.
60	,,	,,	Shoubratie Shaik	Do.			Left eye destroyed by the Native operation Right Capsulo-lenticular :	1½ ys.	Reclination of of right	Successful.
61	,,	,,	Koodruttoolla Shah, or Gora meed	Do. Native of Bokhara 40 yrs.	75	Good and healthy	Capsulo-lenticular Cat : Sees a little with right not at all with the left has		Did not undergo the Operations, having	

			Siryro	in India		Complexion very healthy	eaten opium for 60 years; he now eats 4 mashas in the day, 2 mashas at a time, viz. 48 grains to a dose: formerly used to eat 4 tolas per diem equal to 1152 grains.		been entered before, and afterwards refusing.	
62	Jan.	,,	Dhrum noo Gualla	Do	75	Good	Caspulo-lenticular Cataract.	1 yr.	Reclination of right	Successful
63	,,	,,	Ruhum Ali Khan	Do	80	Good	Capsulo-lenticular Catt. right destroyed by a native.	3 ms.	Do. left	Successful
64	,,	,,	RumzanKhan	Do	80	Good	Lenticular Cataracts.	1 yr.	Do. left	Successful
65	,,	21	Hindoo Boy	Do Resident of Poora	10	Good	Stone of Bladder.	3 yrs.	Lithotomy	Successful Dr. White 10 Lancers Hospital
66	,,	,,	Rumzan Ali Shaikh	Do Resident of Cashmere	53	Small made but robust	Stone of Bladder	8 yrs.	Lithotomy	Do. Do. Do.
67	,,	,,	Bussavon Puethan	Cawnpore	55	Good	Capsulo-lenticular cataracts favorable	1½ yr.	Extraction of the left	Successful
68	,,	,,	PeerKhan Puethan	Do	50	Robust	Do. Do. Do. right destroyed by a native oculist		Reclination of the left	Successful
69	,,	22	Khooshalie Khan	Do	45	Good	Left eye destroyed by a native oculist.	1 yr.	Do. Do. of the Right	Successful
70	,,	,,	Bhowane Tumbolie	Do	60	Good	Capsulo-lentic: Cataract	5 yrs.	Do of the right eye	Successful
71	,,	23	Derreaoo Brahmin	Do	50	Good	Capsulo-lentic: softish cat.	2 yrs.	Depression of left	Successful
72	,,	,,	Nueenpoor Hindoonee	Do Bundlekund	60	Good	Capsulo-lentic: cataracts	2 yrs.	Do Do of the right	Successful
73	,,	24	Kundhaee Chumar	Do	9	Good	Stone of the Bladder.	3 yrs.	Lithotomy	Successful
74	,,	,,	Shaik Menghoo	Do	26	Good	Vision lost by inflammation. Closed pupil right eye disorganized	9 yrs	Artificial pupil of the left(Corotomia)	16 Lancers Hospital
75	,,	,,	Hoosaeen Bux	Do.	25	Good	Do. Do. Do. Closed pupil	4 yrs.	Artificial pupil of the left(Corotomia)	Successful
76	,,	,,	Dhenneea Female Kunjarie	Do.	50	,,	Lenticular cataracts	4 ms.	Depression of the right	Successful
77	,,	,,	Bussumie	Do.	40	,,	Do. Do. right destroyed by native	1 yr.	Reclination of the left	Successful
78	,,	,,	Female Naee Bihton, seller of tobacco	Do.	40	,,	Has been operated on by a native in the left eye	3½ yrs.	Depression of an	Do.

OPERATIONS FOR THE YEAR 1835—IN CONTINUATION FROM NO 50 TO 84 INCLUSIVE, AT CAWNPORE.

No.	Dates 1835.		Names and caste.	Residence.	Age.	Constitution.	State and nature of disease and prognosis.	Duration.	Nature of operation.	Result and Remarks.
79	Jan.	24	Oojagur mull Kaeet	Do.	76	,,	opaque and dilignase cataract Left destroyed a native operator	7 yrs.	Reclination of the right eye.	Successful
80	,,	,,	Bhageerut	Do.	50	,,	Left destroyed by a native operator	3 yrs.	Do. Do. Do.	Successful
81	,,	25	Kishna Brahminder	Do.	60	,,	Capsulo-lentic. Cataracts	2 yrs.	Extraction of the right	Successful
82	,,	,,	Gungoo Mehterannie	Do.	65	,,	Cap : lentic. Cataracts	3 yrs.	Depression of the right	Successful
83	,,	,,	Juggou Brahmine	Cawnpore	40	,,	Cap : lentic. left eye ; right destroyed by a native operator	2 yr.	Reclination	Successful
84	,,	,,	Gungoo Chumarnie	Cawnpore	50	,,	Lentic. cataract right eye	1 yr.	Reclination	Successful

35 Total number of cases.

Certified that to the best of our knowledge and belief on careful enquiry, the above is a faithful account of the result of Mr. Brett's operations at Cawnpore.

Signed,

W. R. White, Surgeon 16th Lancers. M. Ross, Assistant Surgeon 16th Lancers. H. Chapman, Asst. Surgeon 16th Lancers.

Having occasion to leave Cawnpore, the more serious cases were left under the Medical Officer's of the Lancers, and the result of the whole was ascertained by them who also assisted at the operation, and they have accordingly certified as to the result as above.

F. H. BRETT.

REVIEW.

OBSERVATIONS ON SOME FORMS OF RHEUMATISM PREVAILING IN INDIA, BY ASSISTANT SURGEON JOHN GRANT MALCOLMSON, MADRAS MEDICAL ESTABLISHMENT, MADRAS, PRINTED BY ORDER OF GOVERNMENT P. 98.—1835.

There is scarcely any disease which, under mismanagement, commits greater ravages than Rheumatism. With the spoils of the finest regiments it fills the Invalid corps, and thus adds more to the expense of the pension establishment than any other known malady. The consideration of this subject, therefore, regards not only the cause of humanity, but involves an important political question in the financial Department, and loudly calls for some effectual remedy. Considering how deeply the government is interested in this matter, how much valuable information was available to Mr. Malcolmson, and what degree of labour he must have bestowed on this his prize essay, we indeed were led to hope, that he had made great progress in discovering the proper means of treating with success this painful and obstinate disease. In regard to the arrangement of his essay we confess, we never saw a more unmethodical and confused work. Instead of commencing with the causes of the disease, and then proceeding to describe the symptoms, diagnosis, and treatment, he has blended the whole together into one chaotic mass. Nothing can be more annoying to a reviewer than such a want of methodical arrangement. In the present instance, we were literally obliged to arrange Mr. Malcolmson's work, in order to obtain, in some degree, a clear view of the information he has communicated.

Mr. Malcolmson professes to confine himself to such practical observations on Rheumatism as occur in India. He says, and justly, that except fever, there is no disease, more prevalent amongst the sepoys than Rheumatism, which, although not often fatal, has occasioned more loss to the service than all other diseases put together. He observes that it seldom prevails in an acute form; but that its attacks recur periodically, and can often be traced to cold and wet, especially on the setting in of the rains, when the sultry heat of the atmosphere is suddenly cooled by storms and rain. In another par of his work, Mr. Malcolmson says, that this disease is apt to occur both in Natives and Europeans, after sloughing sores have been treated with mercury. The dissipation which prevails during the Moharum is represented as another source of this painful disease; and in a weakly body, confinement, after slight accidents or indisposition, produces the same result. Fever, he thinks, often lays the foundation of protracted affections of the limbs, which however are sometimes the mere consequence of debility. With some of our modern practitioners, and occasionally with Mr. Malcolmson, mercury, when it has been freely administered, is a common scape goat in all chronic affections; but he acknowledges that Rheumatism is a direct effect of fever, even when no mercury has been taken; and that it is not unfrequently most severe in the parts in which the pains had been fixed during the pyrexial period. How lucky for the advocates of mercury that some practitioners never use a grain of that mineral, and have yet found their patients attacked with rheumatic affections! for otherwise the pains in question would undoubtedly have been laid to the charge of mercury. But the modern practitioners, to whom we allude, will find, one of these days, that those eruptions also which are now called mercurial, can occur in the constitutions of persons to whom mercury has never been administered. We have however known more cases of acute Rheumatism cured by the free use of mercury than by any other remedy, and that too when all other remedies had failed. Yet strange to say that, while Mr. Malcolmson has traced Rheumatism to the use of mercury, he also acknowledges that, of all the remedies used in Rheumatism, mercury is beyond comparison the best. Apologizing for this digression, we return to Mr. M's opinion on the causes of Rheumatism in Europeans. In those of a weakly constitution and such as are convalescents cold is said to be the principal cause. The disease also prevails, he says, most

severely in districts where the variation of temperature is great, especially when it is accompanied with moisture. He states, however, that in the hot weather, various cases occur which cannot be traced to any cause, and are often exceedingly obstinate in districts where fevers prevail. At other periods the disease is ascribed partly to moisture and variableness of climate, the exciting cause being long continued attacks of fever. In some cases it is difficult to prove, that the disease does not arise from venereal affections. The following is too important a passage not to be quoted at length.

"To this I would add, that the comparison of venereal sequelæ in the same body of men, in districts where fever is little known and when treated on the same plan, has fully borne out the opinion, that all forms of rheumatism, and pains in the bones and periosteum, are often induced by fever treated with or without mercury; and I may add, that nodes of the long bones may arise without any syphilitic or mercurial action, and as a simple consequence of rheumatism. Few parts suffer more from rheumatism after fever than the scalp; and the intermittent hemicrania is, in many instances, a form of febrile paroxysm coming on with obscure chills and going off with sweats; and at others a sequela of the fever, but partaking of the character of the idiopathic disease of the scalp, which, though intermittent, is often unconnected with fever and not to be cured by the same means. In both forms of the complaint the periosteum is occasionally inflammed and swollen; and the treatment requires to be carefully varied, till a successful combination of measures is discovered. The diffusion of the pain over the scalp or down the neck takes place in each form of the disease, and when that is most distinctly of a febrile character if it continues long or relapses are frequent, all the joints and the trunk suffer; and in one instance the heart became inflammed and required active treatment, principally by local bleeding and mercury.

After the perusal of the foregoing, what will our readers say to the following? By such logic as Mr. Malcolmson's, the young clinical practitioner is thrown into difficulties, from which it would be hard even for Æsculapius to deliver him.

"In addition to the remarks made above on the nature of the evidence of rheumatism being caused by fever, it may be observed, that these pains follow *immediately* the mercurial action, at a time when rheumatism from other causes is almost unknown. The nature of the disease for which it is administered does not seem to make much difference in the frequency and severity of the pains, as they follow hepatitis, dysentery, and simple membranous inflammation when treated by mercury. Whether they more commonly occur after venereal diseases, I cannot say, not being in the practice of using it unless in obstinate or old cases. There is no form of rheumatic inflammation and pains that is not caused by mercury, but the lower extremities suffer most frequently, especially the thigh bones and legs. Sometimes the pains are of a neuralgic character affecting the fleshy parts below the loins, which are occasionally tender to pressure, and they gradually leave the patient from above downwards. When the treatment of severe disease is conducted, however cautiously, by large doses of calomel, the patient rarely escapes more or less subsequent suffering from pains. But it is especially in those examples of frequent occurrence, in which salivation does not follow the exhibition of mercury, that pains follow, even when not persevered in to any great extent."

Alluding to the symptoms of Rheumatism, Mr. Malcolmson observes, that the knees, ancles, heels, elbows, wrists, hips, shoulders, back, and chest are most frequently affected in a consecutive order.

"The pain in the knees is always much complained of, and is generally referred to the whole joint, but sometimes a point of the inner condyle is acutely painful and tender, in other instances the patient presses on the patella, or on each side of the tendon of the rectus from the bursæ being principally diseased. There is no heat or swelling and the patients are frequently suspected of skulking and sent to their duty; when, after a month or two of suffering and aggravation of the complaint by exercise (at this period very hurtful), and the supervention of swelling of the joints, a puffy feel and enlargement of the bursæ, the hands or ancles are tumefied, or the patient wastes, the mistake is seen. The pain in the ancles is usually situated on either side, often a little below the joint, at others in front in the situation of the annular ligament. The heels frequently suffer severely and the pain extends up the tendo achillis and swelling at its insertion is common; but not only does the tendinous substance of this part suffer, but the tendons of the wrists and hands have become pain-

ful and in a few instances have swollen, without any reference to the origin of the disease as caused by cold, abuse of mercury, venereal, &c.

The soles of the feet, the calves of the legs, or flesh of the thighs suffer more rarely than the loins or hips. The roots of the toes, the tarsal ligament, the back of the hands and joints of the fingers are frequently swollen and painful; and the muscular parts of the back, the sides of the chest, the ribs and the sternum often become painful, tender, and swell. And in many rheumatic cases where the patients were ascertained to have had no venereal complaint for years, nor to have taken mercury, the shin bones have suffered from pain and even from swelling. The tissues then, that appear most generally involved in the disease are the ligamentous and tendinous, the periostium, and more rarely the muscular, and we shall see reason to believe that many others are occasionally engaged. The complaint is sometimes strictly local, as I have traced it to cold applied to the affected part only, and the liability of other parts to take on the same morbid action depends on the facility with which all morbid actions are propagated from one part of fibrous tissues to another. Those that have least tendency to attack other parts are the puffiness of the bursæ and pain of the bones.

These symptoms may come on without any constitutional affection and remain for a long time, and relapses may attack the patient again and again before his health suffers further injury, but in a very large proportion of protracted cases, the patient loses flesh and strength and a cachectic habit is the consequence: he languishes in hospital or struggles with his duties, and is looked upon as a burden to the regiment and is frequently unjustly supposed to be a malingerer, and because the skill of the surgeon is unable to restore him to health or fully to understand the obscure train of symptoms which afflict him, he often meets with little sympathy, and the repute of European medical science is injured in the eyes of those, to whom it is of the greatest importance to instil different sentiments. The sepoys are very little given to frequent an hospital, and malingering is very rare amongst them, except in certain circumstances of harassing service."

In treating of those, among the natives, in whom a predisposition to this painful disease exists, Mr. Malcolmson does not set apart any particular division of his work for such an important consideration. The following observation however is an exception

"Those who are supposed most addicted to native living I have usually found to be of the class most subject to low forms of rheumatism. These are most commonly young weakly lads of bad constitution, and often subject from early youth to pains of the limbs, which are induced or aggravated by the fatigue of drill, and depression of spirits from a new mode of life, by which their habitual ails are aggravated, and not uncommonly end in confirmed marasmus. In examining recruits, it is of the greatest consequence both for the good of the service and jusice to the individuals themselves, to reject men of this description; but as the best sepoys are frequently, on enlistment, thin meagre boys who have lived on coarse and insufficient food, considerable skill is necessary to distinguish those likely to turn out well from others. The general aspect of the man is the most certain guide, which is only to be learned by experience, but if the abdominal viscera seem healthy, and the skin soft and devoid of minute dry scales or other affections, there is every chance of his constitution improving on his being taken into pay, which will afford him abundance of food. Very tall lads, except they are northern Telingees, are very subject to illness of all kinds, especially to attonic rheumatism, and are seldom effective soldiers. I have seen short but active lads rejected, discharged, or kept back from promotion, while those taken in their room or put over them on account of their height, were useless to the service from want both of mental and bodily vigour."

That Rheumatic affections, if improperly managed, frequently terminate in marasmus, is unquestionable; but the mismanagement generally takes place, when the sepoy goes to his home. In his native village he is prevailed upon to submit to native remedies, which are of so corrosive a nature as to destroy both stomach and bowels. In this state when his leave has expired, he returns to his Regiment. Mr. Malcolmson thinks, that when the disease assumes the following form, and a sepoy is sent to his home, he will recover.

"Loss of strength, great emaciation, the patient loses his erect position in walking, and all his motions are performed in a languid manner, his countenance is sometimes puffy or pale, he is desponding, indolent and averse to all exertion. His appetite is bad, his bowels costive and the evacuations are often dark. His abdomen is puffy or tympanitic, especially after eating, and he complains of indigestion. The tongue is generally swollen and white. In aggrava-

ted cases there is burning sensation in the abdomen, which is extremely distressing, and often evidently connected with the other symptoms, and probably depends on chronic inflammation of the mucous membranes. In this form of the complaint the patient gradually sinks, and is too often but little benefited by treatment. A few months leave to return to his native village will in many cases restore him to health; and I have reason to believe, that it is in this form of disease that men who have been always sick, recover on obtaining their discharge from the service; a circumstance which is sometimes ascribed to the patients having imposed on the surgeon, and at others to the efficacy of native medicines."

The foregoing is precisely the opposite of our view: which is grounded on experience, circumstances may of course be different on the Madras side of India. In Bengal, a sepoy, really affected with the rheumatism at the time of his going to his home on leave, seldom returns but in the state we have described. The cases, however, which occurred under Mr Malcolmson's eyes, were of a different character, and under different circumstances produced a favourable result.

"These appearances are not uncommon in India, but prevailed to a much greater extent amongst the troops at Rangoon, and were often the first complaints which ushered in the rheumatic pains and marasmus dependent on bad food, moist climate, and fatigue. It was sometimes accompanied with spongy gums and other scorbutic symptoms."

In adverting to rheumatism among Europeans, Mr. Malcolmson says, that the common acute rheumatism of Europe is very little known in India; but he adds, that when cases in some degree resembling it do occur, they are attended with but little hardness of pulse: the skin is dry instead of being bathed in perspiration, and altho' it is hot and painful, still the application of heat is agreeable to the patient.

Referring to the treatment as respects the natives, Mr. Malcolmson makes the following observations.

"The important circumstance in particular, of heat in the affected joints, on which so much weight has of late years been laid by Professor Elliotson and others, as indicating active rheumatism requiring free local bleeding and antiphlogistic remedies, is very seldom met with; and the rule of practice confining evacuations to such examples, and to those in which the pain is increased by heat, is not applicable to the Indian forms of the complaint either in Europeans or natives. When the pains are severe and the pulse quick but small, and there is aggravation of the symptoms with fever at night, the case approaches to the acute form, but active antiphlogistic remedies must not be used, and are either inefficacious or injurious. In these cases there is frequently a good deal of disorder in the abdominal secretions; the tongue is loaded, the stools are dark, and there may be pain in some part of the abdomen. Small doses of calomel with antimonials are the best remedies, and the symptoms rapidly leave on the gums getting sore."

"The best marked examples I have seen, have been in patients who took no medicine, but continued to go through the routine of their duty for weeks or months with intermittents upon them.

The parts most affected are the shin-bones, knees, thighs, and back, and sometimes the head, and these may swell and be worse at night, like mercurial pains. When the complaint is once established it may fix in one limb, which will waste as if the disease were local; and although the pains exist totally unconnected with fever, they are always aggravated by any new paroxysm. The occurrence of this new affection is a powerful inducement to the early and active employment of quinine."

"In several examples of rheumatism, a pain below and to the left of the umbilicus has been accompanied or succeeded by severe and obstinate pain in the loins. A man is taken ill with purging of whitish stools, with pain and hardness of abdomen; pain of loins succeeds and as well as the epigastric hardness is obstinate. Tonics did harm, blue pill, leeches, and a blister and mercurial frictions to the stomach completed the cure. Severe and protracted fever in a sepoy was followed by numbness and pricking sensations in the extremities, and to these pain of the knees and ancles, which swelled, succeeded. Syed Hommed had pains and swelling of the elbows, knees and ancles for twelve days, which were relieved by a slight sore mouth; but pricking sensations below the knees supervened, to which pain of the loins and from the hips downwards succeeded, and were slowly removed by frictions, baths, &c."

Mr. Malcolmson is a zealous advocate of friction; but suggests that a few minutes rubbing is of no use. In addition to the hospital establishment he recommends "*one or*

two regular rubbers." He considers the supply of liniments to be far too scanty, and adds that cajaput oil, and another essential oil distilled from the lemon grass and other species of andropogon, are highly stimulating, and have cured very obstinate pains.

"The rheumatism of India is seldom what has of late been called the hot variety, and is almost in every instance benefited by warmth; it is therefore of great consequence to furnish the sepoys, who cannot be kept warmly clothed, with flannel rollers for the affected parts, which are also of great benefit in the puffy state of the joints and bursæ: and as the disease is kept up by the men lying with only a thin carpet between them and the floor of the hospital, cots or straw mattresses should be furnished to the sick, especially in the northern division.*

"Blisters are remedies of great value, but are seldom useful when the affection is acute, and when many joints are affected they seem hardly admissible. When any degree of fever was present, or the pain had made its attack suddenly, they seemed to favour the transfer of the pain to other joints, but in ordinary cases, especially when the knees, ancles, heels, or smaller joints are painful or puffy, they are far more effectual than frictions and are often the only means by which a cure can be effected; and, fortunately, the natives, notwithstanding their strong prejudice to them in internal complaints, are very fond of them in the rheumatic affections to which they are most adapted."

"No particular advantage has been observed from ointment of tartrate of antimony, or moxas. Mercurial plasters with a little tartrate of antimony rubbed on their surface, have appeared to reduce puffy bursæ, and to ease the pain of the joint. Leeches are not only useful when the joint is hot and recently swollen, but in almost all stages when the pain is local, especially when it is fixed in the hands and condyles of the knees and elbows. They are to be frequently repeated in small numbers if they do good; and blisters will afterwards perfect the cure. When the pains occupy the whole of the long bones, the flesh of the thighs, legs, &c. they are less useful, but swelling of the periosteum of the tibia, clavicles, and sternum when circumscribed, are often greatly benefited by their application. Fomentations are very beneficial in all forms of rheumatic pains, but particularly in those of the bones, or from mercury. A favourite remedy of the natives is marking nut (Semecarpus anacardium) applied to the joints, and is often of great service, but is violent and unmanageable, frequently exciting much inflammation and causing troublesome ulcers.

Warm baths, where warmth can be secured to the patient afterwards, are generally grateful to the feelings, relieve pain and irritability, and are of permament benefit. If profuse sweating and weakness follow, they are to be omitted; for debility is especially to be avoided in this disease. Dover's powder is often a valuable auxiliary, when given along with the bath, and as directed by Cullen in his materia medica, in a large dose and repeated in smaller quantities at *short* intervals."

"Tincture of opium with antimonial powder is a good substitute, but the latter alone is very uncertain even in the largest doses. Laudanum to procure sleep and relieve the pains, will often require to be given in large doses, and by the ease it procures, saves the constitution from much of that destructive irritation which undermines the powers of life and aggravates the local symptoms. It seldom has any injurious effect not easily obviated. Guaiacum, to be used with effect, must be given in large doses; a drachm of the gum three times a day has proved, in a number of instances, of great service. It has like most other remedies often failed; but I am not able to state the circumstances in which it is most useful. The decoction of the wood and the volatile tincture have also been advantageously employed, but they are not remedies of much power. Colchicum is supplied to the hospitals in acetous solution, and whether from the decay of virtue of the medicine, or the form of the disease, it has not been very beneficial. The oleum nigrum has been occasionally prescribed, principally where there was some suspicion of beriberi, but it did not appear to possess anti-rheumatic virtues. In some cases communicated to me, the cold effusion was employed and caused free sweating, but seldom relieved any of the symptoms. Sulphur has removed the pains and cutaneous symptoms together, but whether it did so by restoring the healthy state of the skin, or by its powers over the pains themselves for which it is a popular remedy in Europe, I cannot say; but I have known it useful in common rheumatism where the skin was not diseased."

"But of all the remedies used in rheumatism, mercury is beyond comparison the best, and there are very few forms in which that disease is seen in India, in which it is not safe and generally effectual. The cases which have derived no benefit from it, were those affecting the calves of the legs, and

* At the time this was written, I was not aware that Government had, at the recommendation of the medical Board, sanctioned the issue of cots to native hospitals.

attended with pricking, numbness, and other beriberi and neuralgic symptoms; and where there were scrophulous ulcers or other signs of tainted constitution, and some examples of pains following sores and buboes which perhaps had something of a strumous character."

"Three grains of calomel twice a day have been found too much, and in general one grain and a half two or three times a day is as much as can be given with advantage. It is advantageously combined with antimonial, or, what is better, with James' powder to the extent of three grains; this often opens the skin gently without irritating the intestines, which are liable to take on dysenteric action from more active medicines. For this reason the tartrate of antimony, although a more certain antimonial, has been found inconvenient, by inducing purging. When given by itself, it has not caused sweating, when prescribed in less than one grain doses, and even when combined with opium it has not given relief till a grain of calomel was added: and although in this combination it did not often disorder the bowels, it is better to avoid the use of two irritating remedies at one time."

Of the treatment in Europeans, Mr. Malcolmson briefly observes:

"Mercurial fumigations were strongly recommended some years ago by a Bombay medical officer on the ground of his own experience, derived from his having observed many sepoys discharged the service as incurable, recovering under the native treatment by fumigations with oxide of mercury, and the Bombay medical board recommended it to the seavice. I made a series of experiments with it, using the common mercurial ointment spread on a piece of an earthen pot, which was placed on a small vessel of charcoal between the patient's feet, who was covered, with the exception of the head, with blankets (cumblies) and the fumes allowed to continue in contact with his body for ten minutes. A cure was frequently effected by this means."

We must now conclude our analysis with a strong recommendation of Mr. Malcolmson's labours to the notice of the profession. His essay is enriched with valuable cases; and if he will but follow our advice in regard to its arrangement, and publish a second edition of it, he will present to the Indian public a work of great value and usefulness, on one of the most formidable diseases which have ever been known to afflict the human race.

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CALCUTTA, DECEMBER 1, 1835.

THE PROVISION OF HOSPITALS FOR THE NATIVE SICK POOR IN INDIA.

It has been said by the lamented and beloved Bishop Heber, that it is painful to think "how few relics, if the English were now expelled from India, would be left of their religion, their power, or their Civil and Military magnificence." Might not that respected prelate have added, of their humanity also? A work has been recently put into our hands, which shews that the net receipts of seventeen years' Tax on Pilgrims visiting the temple of Juggernaut amounted to..... £ 99,205

The net receipts for sixteen years from the Tax on the Pilgrims visiting the Temple of

Gya to.....	455,980
Do. Do. Allahabad.....	159,429
Do. Do. 10 years' Trepoley..	120,941
Do. Do. Do. Do.....	84,658
Total for 17 years	8,21,008

If so large a sum as this had been set apart for the relief of the sick poor in India, to what an extent would it have gone in establishing Hospitals in various parts of the country! We do not intend to justify the means by the end; for we are fully alive to the degrading, cruel, and inhuman tendency of these pilgrimages, and would have rejoiced to have had it in our power to say, that the English have never interfered in so revolting a custom, save with the view of ultimately checking it. We must, however, respectfully urge on the attention of Government, that, if the revenue derived from such a corrupt source had been appropriated to objects of charity—to provision for the sick poor, than which there is scarely a more judicious way of being charitable, the evil effects arising from such a tax, would, in some degree, have, been counterbalanced, though it might still not redound to the credit of the donors. But our chief object in alluding to this prolific source of revenue

is to point out the means which have been available for the provision of the sick in this country. There are, however, other resources at hand for this purpose, which are free from the objections raised against the Pilgrim tax, and which therefore can, without any impropriety, be appropriated to its furtherance. From the revenue accounts furnished by the Select Committee of the House of Commans, we learn that the customs and Town duties for 1827-8 amounted—

In Benares to.....	Rs.	79,288
In the ceded provinces to....	,,	77,413
In the conquered provinces to	,,	2,65,790
In the ceded territories on the Nerbudda to..	,,	41,888
Total Rs.		4,64,379

These items of revenue, although mixed up with those derived from other sources, are, according to the evidence of the Honorable M. S. Elphinstone, before the Select Committee of the House of Lords, applicable to local improvements. Now, what other local object can put forth a more urgent claim upon this fund than the provision of the sick poor? and as this is a time of general peace throughout our dominions, we conceive the present to be a very opportune season for offering these suggestions for the consideration of government. The marquis of Hastings, speaking of the increase of revenue during peace, observed that the increase of the year 1822-3 might be expected to exceed that of 1813-14 by six millions sterling; and Mr. H. St. G. Tucker, taking the year 1821-2 as a basis for the calculation, has observed, in his review of the Financial situation of the East India Company in 1824, that in a season of peace, the surplus revenue of India may safely be estimated at two millions sterling. The Burmese war, however, not only absorbed this surplus, but caused an expenditure far exceeding that of other years, and added considerably to the debt of India. Now according to Mr. Tucker a surplus revenue was realized in 1822-3. On these grounds we may therefore reasonably conclude that, if peace be not disturbed, a similar surplus may be expected every year. But there are other arguments which more forcibly lead us to this conclusion. It is well known that the fall in the exchange from 2s. 6d. to 2s. 1d. for the Sicca Rupee, effected by Lord Hastings in 1821, caused a saving of nearly twenty per cent. on the annual interest, for which the Court of Directors were under an engagement to furnish remittance. The reduction of the rate of interest on the Indian debt from 8 to 6 per cent wasthe means adopted by Lord Minto for improving and recruiting the resources of government, which had been exhausted by the wars in which the Company had been previously involved. By this measure Lord Minto secured a saving to the extent of half a million sterling per annum. The same policy has since been pursued by Lord William Bentinck, with a degree of success which is known to all, and need not be pointed out here. To the consideration of these facts if we add that of the state of peace which of late India has enjoyed, and which appears likely to continue, no doubt can remain as to the line of conduct which the Government should adopt in regard to the subject we are considering. This conclusion is further corroborated by the opinion of Mr. St. G. Tucker who observes that, "if the public revenue should become more productive, it would be the duty of Government to repeal or reduce objectionable taxes, to increase the judicial and other establishments, so as to render justice more accessible to the great body of the people, to endow public institutions for providing better means of education, *and hospitals for the care of the sick and the destitute*,**** which may conduce to the comfort, convenience, and well being of our Native subjects." Justice, policy, and humanity concur in strengthening the claims of the Natives on the consideration of Government. If the possession of India has mainly contributed to raise great Britain from her natural level to the high and prominent situation she at present occupies; if this is the cause of the great influence she has on the political

movements of so many powerful nations, surely the least return she can make to India is the alleviation of the miseries of her destitute population in the time of sickness.

On a question of this nature—so nearly allied to our best feelings, we are apt to be led away, in a strain of declamation, to undue lengths. It is therefore, fortunate perhaps that the narrow space to which we are confined reminds us of the necessity of turning to another important branch of this subject; viz. the nature of the hospitals required and the establishments to be attached to them. The manners and customs of the people of this country are very different from those of other nations, and it is really very injudicious to lavish large sums of money in erecting lofty and splendid buildings for the poorer classes of a people the wealthiest of whom generally live in hovels and confined apartments. Such costly and splendid buildings as have been proposed for the Calcutta Fever Hospital would involve a useless and unnecessary expenditure. The buildings required for the kind of people who are likely to be its principal occupants should be constructed after the manner of the Hospitals built for the use of the native regiments. In these, space and every other necessary comfort are secured upon an economical plan, and from comparatively slender means much benefit is derived. We would, however, suggest the propriety of building the wards for the Hindoos and those for the Musulmans apart from each other, and of attending scrupulously to the prejudices of caste and custom in every other point. Attention to these particulars is one of the principal means of reconciling to our views a people so remarkably averse to all innovation, as the natives of this country are. In considering the establishment of an hospital in Calcutta we should extend our view to the interior, and set an example here, which may, without insurmountable difficulties, be followed throughout the country. If this object be not gained, the institution of a single Hospital, in the metropolis of India, the enormous cost of which would be an everlasting objection against every other similar attempt, would scarcely do a tithe of the good which, under different circumstances, it might have been calculated to do to the country at large. Hence the necessity of economy in the erection of the one which has been proposed for Calcutta.

In regard to the requisite establishment for such Hospitals, we are inclined to think that the superintendence of either a military or a civil Medical officer will be indispensible whose salary ought at least to be one hundred rupees per month. When we consider the expensive education which medical men receive, the sacrifices they are obliged to make in coming out to India, their present reduced allowances, and the disheartening prospect of their promotion to the higher grades of the service, we cannot help thinking that some such further mode of bettering their situation is not only a matter of justice on the part of Government, but likewise of prudent policy. The subordinate establishment for such hospitals should consist of a well instructed native practitioner, and such servants as are generally attached to Regiments of Native Infantry. The dieting of the poorer classes of the sick would cost but a trifle. Two annas per diem is sufficient for each patient, so that for a hundred patients the daily amount would be only 12 Rs and 8 annas, or 366 Rs. per month.

The above is but a general outline of what may be done for the extension of the charity we are considering: the precise manner of carrying it into effect depends upon so many local considerations as not to admit of a more particular detail in a notice of this kind. Matters of minor arrangement are best looked after by a committee, who can attend to them with more care, and consider the respective merits of each separately. We however trust that the present rulers of India will do all in their power to exalt the name of Great Britain by extending, at least to the sick and the destitute, their well known charity and benevolence.

SELECTIONS.

INSTITUTES OF MEDICINE,

DELIVERED BY

ROBERT J. GRAVES, M. D.,
King's Professor, Dublin.

LECTURE III.

GENTLEMEN,—I shall proceed to take up my subject where I left off on yesterday. I laid before you some considerations respecting the influence of light on animal and vegetable bodies, and spoke of the curious fact of a vast proportion of our globe being covered by a mass of dark unfathomable waters, to which no ray of light ever penetrates.

When we examine the ocean more attentively, and with a view of discussing the question, whether any of its countless inhabitants are tenants of that portion of the black abyss where daylight never enters, we find reason to believe that the great majority of marine animals inhabit the upper portion of the deep, or those shallower parts which lie in the vicinity of continental or island shores; in fact, that by far the largest quantity of life courts the surface, and that a very small proportion dwells beyond the point to which the rays penetrate*. But with respect to the question before us, there can be no doubt that the absence of light is unfavourable to vitality, and this appears to be the reason why we observe life so abundantly diffused in the neighbourhood of coasts, where nature has spread out a considerable extent of sea within soundings, and rarely amounting to one hundred fathoms in depth. If you take that portion of the sea surrounding Great Britain, which lies within one hundred fathoms, you will find it to extend from Norway over the German Ocean, and so on by France to the coast of Spain, which, with the quantity of sea within the same depth which encompasses these islands, will give you an extent of surface as large as all Europe, the greater part of which receives some portion of light, and is consequently a fit habitat for living creatures. Hence it is, too, that shoals and sand-banks, such as we find near the coast of Newfoundland, teem with millions of living beings, furnishing, year after year, those inexhaustible swarms of fish, which afford employment and food to so many thousands of our countrymen.

I regret that the data in my possession do not enable me to answer the question directly, as to whether the dark and rayless regions of the deep are wholly tenantless. It is true, that Biot, as quoted by Pouillet, speaks of fishes which usually live at a depth of from five to six hundred fathoms. It is perfectly obvious, that if any species of fish were destined to live in darkness, it would be quite contrary to the economy of nature to give them eyes, and as all known fishes have eyes, their natural abode must be far above this depth, and within the zone of light to which the red rays penetrate, and this we have already seen does not exceed one hundred fathoms. Wherefore, until such fishes are discovered, and it has been established that they are without eyes, I should be unwilling to admit, that any species of fish are inhabitants of the dark abyss. This assertion is also disproved by the fact, that fishes, which live at a great depth from the surface, are generally furnished with very large eyes; thus we find, that the pomatomus telescopium, which is fished up from a great depth near the coast of Nice, possesses a very large visual organ. If any thing further were necessary to show that this position was untenable, it would be the palpable absurdity of nature giving unusually large eyes to fishes inhabiting low situations, and merely ordinary eyes to those which dwell in parts far deeper and darker.

"It is a curious fact," says De la Beche "that all the mollusca known to us have been found, with perhaps a few rare exceptions, with living animals in them, at depths less than one hundred fathoms." This furnishes a new and interesting subject for investigation, for it would seem to show that the depths of the ocean are untenanted, and that there is a vast space of it solitary and uninhabitable.

Other circumstances besides the absence of light are supposed to limit the depths at which animals and vegetables may exist. Thus it is said, that at great depths there is not a sufficient quantity of air combined with the water to answer the purposes of respiration. On this point, however, nothing certain can be affirmed, and those, who imagine that air does not pervade the deeper parts of the sea, confine themselves to mere assertion. If the water in such situations was entirely devoid of air, neither fishes nor any other thing endowed with life could exist, for respiration is common to all. It has been inferred, indeed, from

* The red appearance of the sun, when near the horizon, or when viewed through a dense fog, affords a familiar illustration of the rapid loss of the other component parts of the solar ray in penetrating through certain media. Another curious illustration is mentioned in the *Saturday Magazine* for Aug. 18, 1832: "The ephemera, or day flies, which are, in the height of summer, ever sporting over rivers, pools, and streams so thick that they, in some instances, absolutely darken the sun, or *make its light fall red upon the ground.*

the composition of the air in the swimming bladders of fishes, that the oxygen of the atmosphere penetrates deeper into the ocean than the nitrogen, for the latter is found to be almost entirely absent, or only in the small proportion of one-tenth, in the bladders of those taken from a great depth, while in the bladders of those, which inhabit shallow waters, we find the air to consist of nearly pure nitrogen. With respect to this it may be observed, that the facts brought forward are quite insufficient to authorise us to draw any such inferences, and I think we should rather attribute the relative proportions of the constituents of air as found in the swimming bladders of fishes, not to the composition of the air combined with the water at any given depth, but to the secreting power of the air-bladder itself.

But, in addition to the absence of light and the supposed want of air combined with the water, it is plain that animals, living at great depths, must be calculated to bear enormous pressure from the vast mass of superincumbent fluid, and must be therefore of a different structure from land animals. Bodies on land are merely subject to the weight of the atmosphere, but if a man descends in a diving bell to any depth, he finds that he has become subject to a new and very considerable inconvenience from the increased pressure. At the depth of thirty-two feet he bears a double atmospheric pressure. Again, if he ascends a high mountain, such as Mont Blanc, his physical powers are much weakened by the diminished atmospheric pressure, and very dangerous consequences are apt to ensue, as I shall hereafter explain. "A creature (observes De la Beche), living at a depth of one hundred feet, would sustain a pressure (including that of the atmosphere) of about sixty pounds on the square inch; while one at 4000 feet, a depth by no means considerable, would be exposed to a pressure of 1830 pounds on the square inch. It will be obvious from our knowledge of the structure of animals generally, that we cannot, with any reference to that structure, more particularly that of the delicate vessels, suppose any one creature capable of sustaining such enormous differences of pressure with impunity. We cannot conceive that the same animal could live equally well near the surface and at a depth of 1000 fathoms, more than we should consider that a man would feel himself equally comfortable at small heights in the atmosphere, and at an elevation of 30,000 feet above the level of the sea." We may, therefore, safely conclude that all marine animals which are furnished with eyes live habitually within the depth of 100 fathoms; their organs of vision indicate the luminous upper stratum of the ocean as the usual place of their residence, beyond which the increased pressure they encounter in progressing downwards must prevent them from proceeding, except occasionally, and for short spaces of time. "Creatures living in the atmosphere, all other things being the same, would, however, suffer less in proportion from a given amount of vertical change of place than creatures living in the sea." Thus we find that the condor of the Andes darts from one of the highest peaks, along the western declivity of Pinchincha to the very brink of the sea, thus traversing all climates in a few seconds, from a pressure of barometer of twelve inches, to a pressure of twenty-eight.

Lyell mentions that when several companies were formed in England to work the mines in Mexico, some of the English miners who were sent over, being fond of field sports, brought some greyhounds with them, to have the pleasure of coursing on the Mexican mountains, which abound in hares. They found, however, to their great mortification, that the dogs were quite unable to come up to or catch the hares of Mexico. This is explained by recollecting that these greyhounds being transferred from the low and flat shores of England to a mountainous country raised several thousand feet above the level of the sea, and thus subjected to a considerable diminution of atmospheric pressure, become short-winded, and incapable of running down their game. But in the course of a few years, their offspring, who were born and brought up in the country, having their chests and respiratory system adapted to this elevated situation, proved themselves in running down hares fully equal to their parents in England.

I may observe here that some marine animals appear to possess the power of bearing enormous pressure. Thus the whale when harpooned, or when pursued by its enemies the narwahl and sword fish, dives to a vast depth in attempting to effect its escape. The sword fish, which has harassed him near the surface, follows him until he can go no further, and then returns to the surface awaiting the return of the whale, who, being placed by his deep descent in an unnatural condition, becomes so weakened by it, that when he returns to the surface he falls an easy prey to his enemies. Captain Scoresby observes, p. 135 of his work, "when attacked the whale generally dives at once to an immense depth." "It may assist our comprehension of the enormous load that the whale endures when it descends to the depth of

800 fathoms, which it is often known to do, to be informed, that the pressure of the water at this depth on the body of a whale must sometimes exceed the weight of sixty of the largest ships of the British navy, when manned, provisioned, and fitted out for a six-month's cruise."

Such are the most interesting facts connected with the question, whether animals can exist at great depths of the ocean and far beyond the limits of light On the whole, it would appear that we have not a sufficient number of data to enable us to determine the depths at which living animals may exist. I have expended more labour on this subject than it would seem worthy of (although it is by no means beneath the notice of the physiologist), but have not been able to satisfy myself as to the lowest situation in which invertebrated marine animals may exist, or whether those found at great depths be merely temporary sojourners or constant inhabitants of such localities. That some invertebrated animals live beyond the extreme limits of light, would appear from an observation made by Captain Scoresby, while on the coast of Greenland. He says, "the sea here not being unfathomable, as in the more eastern fishing stations, the line of the first fast boat had lain for some time on the bottom; on its being hauled in, several fine specimens of the beautiful species of star-fish, asterias caput Medusæ, were found clinging to it. The depth of water here was about 250 fathoms." Observe, here these specimens of star-fish are described as being extremely beautiful, that is to say, their colours were strongly marked, and of great brilliancy. Now, reasoning from analogy, it would appear to me to be very unlikely that such distinct and brilliant colours could exist in these animals, if they had been born and spent their lives at so great a depth from the surface as 250 fathoms. We know that plants reared in darkness lose their colours, and we are also aware that the absence of light has a somewhat similar effect on animals, and therefore it is very probable that these star-fish were only tempory sojourners at this depth.

Let us now, gentlemen, proceed to investigate the influence of light on the vegetable world. I need not tell you that a vast deal has been written on the influence of light on plants; neither is it necessary that I should dwell on this matter, for you will find all that is known on the subject in Lindley's Botany, and various other similar works. You all know what delicate indices plants are of the different atmospheric changes connected with light; many of them unfold their beautiful flowers to warm the sunshine, but close them up as soon as the sun has been obscured by clouds. You are also acquainted with the fact that some plants open their flowers in the morning, others at noon, and others again in the evening, so that a person may thereby almost guess the hour of the day.

"It was long since remaked by Priestley, that if leaves are immersed in water and placed in the sun, they part with oxygen. This fact has been subsequently demonstrated by a great number of curious experiments made by Ingenhouz, Saussure, and Linebier. Saussure found that plants in cloudy weather and at night inhaled the oxygen of the surrounding atmosphere, but as soon as they were exposed to the rays of the sun, they expired the oxygen they had previously inhaled in about the same quantity as they had received it, and with great rapidity. Dr. Gilly found that grass leaves exposed to the sun in a jar for four hours exhaled a considerable quantity of oxygen. Heyne tells us that the leaves of *bryophyllum calcinum* in India are acid in the morning, tasteless at noon, and bitter in the evening; Link himself found that they readily stained litmus paper red in the morning, but scarcely produced any such effect at noon. The same phenomenon is also said to occur in other plants, as *cacalia ficoides, sempervivum arboreum,* &c. This stain in the litmus paper could not have arisen from the presence of carbonic acid, as that gas will not alter blue paper, but must have been caused by the oxygen inhaled at night. It has been found that this last power is retained even at noon if the plant is not exposed to the sun, a similar explanation of a phenomenon, remarked by Pagot de Charmes, who found that the flowers of the cichorium intybus were daily changed from blue to white, according to the action of light.* It is also well known that fruit is more acid in the morning than the evening.

I need not tell you that the flowers and leaves of all plants court the light; indeed this tendency is manifested sometimes in a very curious manner. You will see this exemplified in the various flowers which adorn the dark and comfortless abodes of the poor tradesmen in the Liberty. These poor creatures (for however poor the being is, or however confined by the nature of his employment, he never forgets the green freshness and living loveliness of nature)

* I have no where seen an explanation of the very singular change of colour produced by heat in common fuci; I remarked it many years ago when employed in preparing a *hortus siccus*. When a hot smoothing iron is passed over the fronds of the *fucus serratus, f. vesiculosus,* or indeed, of any of the common reddish-brown sea-weeds, their natural colour is instantly changed to a bright green, which is permanent; hot water effects the same change.

delight in flowers and birds*, and among them you will frequently see a geranium, almost as sickly as its owner, turning its lank and stunted leaves with unvarying constancy towards the light, and it is a curious fact, that if you harass them, or, in other words, if you continue to change their position after they have arranged themselves for enjoying the light, so as to oblige them to do the same thing over and over again, the constant expenditure of vitality necessary to accomplish these changes wears out the plant, and prevents its proper development. M. Dutrochet, a physiologist whose discoveries have excited a great deal of attention, has made some remarks on this subject, which I shall beg leave to quote. He seems to think that it is only in the coloured parts of plants that we find this tendency to seek the light. "Stems," says, he, "are generally directed towards the light, and this is in accordance with their colour, which is usually green, while the roots have usually a tendency to avoid the light, which coincides with their want of colour. The colour of the roots is, in fact, nothing but that of the vegetable tissue, and can by no means be compared to that of the petals of some plants, which arises from the presence of a white colouring matter. Light, which is the principal but not the sole cause of the colour of stems and their organs, has no power of infusing colour into their roots as may be easily seen by roots growing in a glass of water. Here, in spite of the influence of light, they constantly remain colourless, and this does not depend upon immersion in water, because leaves immersed in that medium are nevertheless green. Although roots in general have no tendency towards the light, yet such a disposition does become manifest, *provided the terminal shoot of a root becomes slightly green*, as occasionally happens.

"Having induced some seeds of mirabilis jalapa to germinate in damp moss, I remarked that the young roots, when about as long as the finger, were terminated by a shoot of slightly green colour. Wishing to know whether these roots would turn towards the light, I placed them in a glass vessel filled with water, having a wooden cover pierced with holes to receive the roots, and then enveloped the vessel in black cloth, leaving only a narrow vertical slit through which light could enter the interior. This slit was exposed to the rays of the sun, and a few hours after I found that all my roots had bent back their points towards the slit through which the light was introduced. The same experiment was tried with colourless roots, but no alteration in their direction was produced. From this it appears evident that colour is one of the conditions that determine the directions of vegetables and their parts towards the light, and consequently towards the sky.

"This is so true, that colourless stems are known to assume the direction of the roots. In the sagittaria saggitifilia this is particularly obvious. Shoots are produced from the axillæ of all the radical leaves which grow at the bottom of the water; these shoots have their points directed towards the sky, like those of all vegetables. The young stems which are produced by those shoots are entirely colourless, like roots, and instead of taking a direction upwards the sky, as coloured stems would do, they turn downwards, pointing towards the centre of the earth. These subterranean stems next take a horizontal course, and do not assume any tendency towards the sky, until the points become green."

M. Dutrochet has remarked a similar phenomenon in roots. "It is well known that the exposed stems of many plants produce roots. When green, these turn upwards, as in the pothos and cactus philanthus; when colourless, they point downwards. Hence it is to be inferred, that stems do not ascend merely because they are stems, but because they are coloured; and that roots descend not in their quality of roots, but because their parenchyma is colourless."

So far M. Dutrochet. It appears to me, however, that this argument is fallacious. The facts adduced merely prove that the parts which are attracted by light are also generally coloured, or, in other words, that colour and irritability to light generally go together. But it might as well be said that the irritability to light was the cause of colour, as that the colouring matter was the cause of irritability. These properties are both related to light; both, too, are equally useful, but there is no necessary connexion as cause and effect between them, as is evident from a fact adverted to by M. Dutrochet himself. The radicle of the parasitic miseltoe is of a paler green than the outer parts, and, instead of turning towards the light, it avoids it with so much pertinacity, that it is impossible to induce it to take such a direction, so that it seems to be repelled by the light.

This theory, however, seems to have met with a very favourable attention;—it has been adopted by Lindley and some others, and it may not be amiss to trace it further. M. Dutrochet says that "the action of light is so powerful on the leaves of plants, that not only does the upper surface of the

* The sale of caged singing birds is very considerable in Dublin, and it is remarkable, that the greater number are bought by the room-keepers who live in the narrowest lanes and alleys of the city.

leaf turn towards the sky, and the lower towards the earth, but that, if the position of the leaf should happen to be inverted, this disposition causes the petiole to twist round so as to enable the deranged laef to recover its former aspect." Here, again, we have the theory that the deeper colour turns toward the sky or light. And this is so constant a law, that it will be found that if that surface of the leaf, which is naturally inferior, is more deeply coloured than the superior, the petiole will be twisted round by the greater affinity of the lower surface for the light, which will thus become uppermost, the leaf presenting the appearance of an inverted leaf. This may be seen in many grasses, but particularly in the zea, Mays. triticum repens, and agrostis rubra. Hence it is to be concluded that the upper surface of the leaf is not turned towards the heavens merely in consequence of its quality of being the upper surface, but because it is generally most deeply colored."

Here it will be necessary to inquire, in the first place, whether the proper under surface of such leaves was of a deeper colour before it turned upwards. In the next place, the fallacy of this conclusion is clearly proved by a fact that Dutrochet has entirely overlooked, viz., that while rolled up in the bud, and while very young during the process of unfolding, most leaves exhibit little or no difference of colour on their surfaces. The shape of the petiole, and its mode of attachment to the stalk, would appear to be the cause which first determines the relative position of the surfaces of the leaves. At the very first moment the bud begins to expand, the central leaflets exhibit the proper directions of their upper and under surfaces, and this occurs at a time when both are equally shaded from the light. Again; according to this theory we should have the leaves of plants growing in the dark with their upper surfaces turned in every direction,—some upwards, others downwards. This, however, is not the fact. If, according to Dutrochet, it is depth of colour which determines the position of the surfaces of leaves, it would be natural to infer, that here where there is an absence of colour as well as of light, and consequently nothing to regulate the relative positions of the leaves, we should find their surfaces taking every direction indiscriminately, which is contrary to the fact, such plants being known to arrange their leaves in the same way as if they had been constantly exposed to the full glare of day.

The following observation, which occurs in Silliman's Journal, No. 13, p. 193, affords a strong proof of what I have stated. "It frequently happens in America, that clouds and rain obscure the atmosphere for several days together, and that during this time the buds of entire forests expand themselves into leaves. These leaves assume a pallid hue until the sun appears, when within the short period of six hours of a clear sky and bright sunshine, their colour is changed to beautiful green. One writer mentions a forest on which the sun had not shone for twenty days. The leaves during this period were expanded to their full size, *but were almost white*. One forenoon the sun began to shine in full brightness; the colour of the forest absolutely changed so fast that we could perceive its progress. By the middle of the afternoon the whole of this extensive forest, many miles in length, presented its usual summer dress." Here, according to Dutrochet's theory, previous to the appearance of the sun, many of the leaves ought to have been turned upside down.

M. Dutrochet has also endeavoured to establish the same law with respect to the petals; but here there are obvious difficulties to contend with. Thus he has not been able to account, in anything like a satisfactory manner, for such exceptions as are presented by the digitalis purpurea and fritillaria latifolia. His next observation is more interesting. The part I quote is taken from Lindley's Botany. From the following and some other experiments, M. Dutrochet infers, that the direction of leaves to the light is not mechanically caused by the operation of an external agent, but is due to a spontaneous motion put in action by the influence of external agency. He took a leaf and cut off the petiole, the place of which was supplied by a hair hooked by one end upon the leaf, and having a piece of lead attached to its oposite extremity. They were then plunged into a vessel of water; the weight of the lead carried the leaf to the bottom of the water, where it stood erect, in consequence of its lightness inducing it to attempt to ascend. Being exposed in a window, so that the under surface was turned towards the light, no alteration in its position took place. Now, as from Bonnet's experience, it is certain that leaves immersed in water act exactly as if surrounded by air, it is to be inferred that the external influence of light is of no effect, unless aided by a spontaneous power within the vegetable, which was destroyed by the removal of the petiole. Leaves, immersed in water with their petioles and stem uninjured, under similar circumstances, turned towards the light as they would have done in the open air. The power thus supposed to exist in all probability depends on the same nervous matter which has elsewhere been shown to exist in all plants, and especially in those called *sensitive*."

I shall conclude my quotations from M. Dutrochet's work with the following observations:—"On the other hand, many of the plants and zoophytes which inhabit the

salt or fresh waters, manifest an aversion to a strong light, and seek to maintain themselves in a moderate degree of light. They rise towards the surface of the water during the morning, retire again to the depth during the mid-day glare, and again approach the surface in the evening. Many species of the conservæ, for instance the conserva amphibia and the conserva frigida, grow only during the autumn, winter, and spring, and disappear in summer, when the water is no longer in sufficient quantity to protect them from the perpendicular rays of the sun. Mosses and ferns endeavour to defend themselves from too much light by selecting the north and north-west side of trees, hedges, or rocks. This is well exemplified by the Irish round towers, the northern and north-western surfaces of which exhibit in many cases, as at Cloyne, a luxuriant growth of cryptogamic vegetation, while the opposite parts are comparatively bare. It is well known that the Indians and backwoodsmen of North America are frequently assisted in finding their ways through the forest by examining the trees, which indicate the north by means of the greater quantity of mosses, &c. which grow upon that side of the trunks. In fine, several of the algæ are only to be found among the most shady woods, or within the recesses of caverns, where they enjoy the total absence of light."

So much concerning the action of light on plants. I shall now speak of the remarkable manner in which it modifies the phenomena of animal life. Before I enter on this subject, however, I may remark, that the life of plants is affected in a very remarkable manner by external agents, and hence it is, that even trees of the same species sometimes differ very much in their texture. The hardness of the wood of trees varies very much in different situations, and this depends not only on the peculiarities of the soil and the presence or absence of a humid atmosphere, but also on the quantity of light to which the tree is exposed, and the exercise it takes during its life. It seems an odd thing to talk of the exercise of trees, but this is only an expression of the fact. In this country, but particularly on the western coasts, where the Atlantic blasts sweep roughly over the land for many months in the year, the trees have too much exercise, and are consequently somewhat stunted in their growth. Homer tells us, that the heroes of old used to cut the wood for their spears from trees growing in an exposed situation, from a conviction, and it was a just one, that the toughest wood is to be obtained from trees constantly exposed to storms. Trees which grow in thick groves, as beeches in some parts of Holland and America, may present a very fine appearance, but they are good for nothing but firewood. Speaking of these trees, the author of "A Tour through South Holland" observes,—"These trees are so close together, as to exclude every ray of the sun, as well as to impede the action of the atmosphere; and the consequence is, that when a log of beech-wood is brought out of the forest into the open air, it rives and splits in a most extraordinary manner. This is, indeed, the case with most other wood; and it explains why hedge oaks, or trees that have grown singly and been thoroughly exposed to the air, are less liable to split, and therefore preferable in ship-building to those which have grown in wood." This also explains the preference given to the hill-grown pines of Norway over those of Canada, and to the British over the American oaks.

I have long since detailed to my class the interesting experiments of Mr. Edwards, made many years ago and now pretty generally known, in which he has shown in what a remarkable manner light modifies the development of animals. He has established the very curious fact, that if tadpoles be nourished with proper food, and supplied with water of a suitable description, but entirely deprived of light, their development becomes arrested in a very extraordinary way. They grow up to be enormous tadpoles, but never turn into frogs. This explains the peculiarities of some animals, as the Proteus angiformis, which have been looked upon as anomalies in nature. Mr. Edwards pointed out also the curious fact, that, in France, persons who live in caves or cellars, subtracted for a great portion of their existence from the influence of light (and we have some of these wretched beings in Dublin, too), are apt to produce children wanting or deformed in the upper and lower extremities. Here we observe a singular arrest of development in the offspring of persons who spend the greater part of their time in the dark, presenting a degree of analogy with what has been brought forward respecting tadpoles reared up in a total deprivation of light. Linnæus, in his account of his tour through Lapland, enumerates constant exposure to solar light as one of the causes which render a summer journey through countries situated in high northern latitudes so peculiarly healthful and invigorating. I have often remarked that scrofula is a frequent inmate of porters' lodges in the country. They are generally entirely overshadowed by a dense foliage, which may contribute to produce disease, both by excluding light and ventilation. On this subject the following observations by my excellent and learned friend, Dr.

James Clark*, require particular attention, and ought to be made known to all country gentlemen. "Large trees, which are both an ornament and an advantage at some distance from a house, become injurious when so near as to overshadow it, or prevent the air from circulating around it and through its various apartments. The atmosphere of a building overhung by trees, or surrounded by a thick shrubbery, is in a state of constant humidity, except in the driest weather, and the health of the inmates rarely fails to suffer. The natural moisture of the country, arising from the humid state of the soil and vegetation, is greatly increased by such a mode of planting, and artificial atmosphere is thus created, which renders a situation of this kind much less healthy than the more open parts of large towns."

MEDICO-CHIRURGICALES.

THE four numbers of the *Journal des Commaissance Medico-Chirurgicales*, for its second year, contain the following original articles :—

No. I.—1st. On tracheotomy in croup, by M. Trousseau. 2nd. On the immoveable apparatus employed in the treatment of fractures, by M. Mayor of Lausanne. 3rd. On epidemic dothinenteries, by M. Gendron.

No. II.—1st. On a new local treatment for bubos, by M. Renaud. 2nd. Case of accidental empalement, by M. Legraux. 3rd. Extraction, replacement, and consolidations, of a painful tooth, by M. Cabanes. 4th. On the excision of uterine polypi by metallic threads, by Lerpiniere ; with several other minor papers.

No. III —1st. On water as a therapeutic means, by M. Cristophe. 2nd. On the identity of gonorrhœa and syphilis. Note by M. Ricord. 3rd. On simple quinine as compared with its preparations, by M. Trousseau.

No. IV.—1st. On the mechanism of natural labour, by P. Dubois, Professor to the Faculty of Medicine. 2nd. Radical cure of hernia in small children, by M Meynier. 3rd. On the efficacy of camphor-vapour in flying rheumatism, by M. Houeix. 4th. Cesarean operation ; extraction of a living child ; by Gustavus Vignolo.

We proceed to notice some of these papers :—

TRACHEOTOMY IN THE LAST PERIOD OF CROUP.

We have already analysed the preceding papers of M. Trousseau, in which he describes his successful cases, five in number. During the months of June and July, he operated eight times, and saved three patients, in addition. Let us now turn our view to the other side of the question :—

Since the year 1826, the author has performed tracheotomy (in cases of croup) on thirty little patients ; of these, eight have been saved, and twenty-two are dead. But of the latter, six cases should be subtracted ; as three of the children were already dead when the trachea was opened, and in three death was produced by the inexperience of the assistant, who was unable to replace the sound, which was expelled during a fit of coughing. But we have eight cures out of twenty-four cases. Besides, from the table given by M. Trousseau, it would appear, that of the sixteen last operations which he has performed, nine were successful. It would also appear from the same table that boys are more subject to croup than females. Of the thirty operated on, eight were females, and twenty-two were males. It is remarkable that all the females died. The author regards it as an indisputable point of doctrine, not only that the operation should be performed as early as possible, but also that it should be done in all cases of croup, and combats the objections made to operating from the danger of tracheotomy, or the chance of performing an useless operation ; he considers croup as invariably fatal whenever the false membrane has descended into the larynx, and endeavours to show, that with proper attention, the physician will seldom be mistaken in his diagnosis. As soon as the incision has been made into the trachea, the physician's first care should be to introduce the dilator, and open its branches gently, so as to dilate the wound, and give exit to the blood, false membranes, &c. Ten or twelve minutes having elapsed, the surgeon must clean out the trachea with a morsel of sponge, placed on the end of a whalebone stick, so as to remove all the mucus, false membrane, &c., and leave the mucous membrane of the air passages clean for the action of topical remedies.

When the trachea and bronchi have been thus well cleared, M. Trousseau proceeds to cauterize, either by imbibing the sponge with the caustic fluid, or by dropping it from a quill into the trachea. This should be repeated, at least, six times on the first day, and three times on the second.

When the caustic solution is applied on sponge, it may be made with eighteen grains of nitrate of silver to a scruple of water ; for installition, four grains to the scruple is enough ; immediately after cauterization with the fluid indicated, M. Trousseau introduces a canula and fixes

* Article TUBERCULAR PHTHISIS, in the *Cyclopædia of Practical Medicine*.

it firmly, taking care, however, to clean it from time to time.

On the fifth or sixth day, if the larynx appear free, the canula may be closed for one-quarter of an hour or one-half hour. After some time has elapsed it may be re-closed for two or three hours, and then for ten or twelve. If after this time the respiration remains free, the canula may be taken away and the wound closed. In six or eight days the opening into the trachea is completely cicatrized.

DENTAL NEURALGIA—EXTRACTION OF THE TOOTH—REPLACEMENT AND CONSOLIDATION.

M. Proch, seventeen years of age, being affected with violent toothach during eight days, requested the anthor to extract the tooth ; having already had experience of the efficacy of the means which he proposed to employ, M. Cabanes extracted the tooth, and finding the alveolar cavity sound, immediately replaced it. As the vasculo-nervous pedicle, which enters the root of the tooth, was destroyed, there was no more pain ; the alveolar cavity contracted round the tooth, and fixed it so firmly, that ten months afterwards it was as useful as any of the other teeth.

The editor of the journal says, he has two ladies at Paris amongst his patients, on whom M. Pernet performed the same operation. The teeth were as solidly fixed in the head, as if they had never been touched.

WATER AS A THERAPEUTIC MEANS.

The author's theory on the action of cold water in external affections is simple enough ; it prevents tbe development of vital properties, by refrigeration, and, by cleaning the wound, prevents the danger of purulent absorption. In support of its efficacy, he cites several cases in which cold water was employed by him with success. In two cases, where the fingers and toes were lacerated by machinery, the assiduous employment of cold aspersions effected union of the injured parts with little or no suppuration.

ON THE MECHANISM OF PARTURITION.

This is the second part of a long, but well written and ingenious paper, by M. Dubois, who was lately chosen professor of accouchment to the Faculty of Medicine. The deductions drawn by the writer are taken from an assemblage of 2300 cases examined by him within the space of four years, for the purpose of determining the relations of the fœtus with the pelvis. We regret that we cannot follow the author throughout the various considerations which he developes We must, however, be content with noticing his conclusions, which are,—

1st. In the left occipito-lateral positions, the occiput is almost always directed obliquely forwards; while in the right occipito-lateral, it is more frequently directed obliquely backwards.

2nd. In the commencement of labour the head is almost always inclined on the anterior region of its lateral regions, in such a manner that one parietal is always lower than the other ; as the head penetrates into the cavity of the pelvis, this inclination becomes corrected.

3rd. That in descending into the cavity of the pelvis the head of the fœtus in general executes a movement of flexion, but this phenomenon is far from being constant and regular, and the anomalies which it presents do not commonly influence the duration or difficulty of labour.

4th That it is not the perpendicular and biparietal diameters, but a diameter very close to the occipito-frontal, and a transverse diameter still smaller than the biparietal, which are in relation with the diameters of the superior brim, when the head of the child passes it.

5th. That the head of the fœtus executes in the pelvis a movement of rotation, which usually conducts the occiput into the arch of the pubis ; that this movement ordinarily is accomplished in the same sense, whether the occiput be primitively directed forwards or backwards : that it is simply confined in the first case, and extensive in the second : that this movement may be and often is incomplete ; that it may be exaggerated or null ; that the two first cases have no marked influence on labour, but that its absence, when the occiput is directed backward, may render the labour more long and difficult, without, in general, preventing it from terminating spontaneously ; hence the movement of rotation, bringing under the arch of the pubis the occiput, primitively behind (a movement which Solayres, Baudelocque, and their successors, have regarded as an exception), ought to be regarded as the rule ; while the remaining of the occiput behind, and, *a fortiori*, any movement of rotation carrying it into the curve of the sacrum (circumstances regarded by them as the regular motion), should, on the contrary, be considered as an exception of a very rare kind.

That the inclined planes do not exercise any influence on the production of this phenomenon, which is due partly to the form and mobility of the head, and partly to the form and resistance of the cavity traversed.

6th. That the head enters the inferior straight, according to the direction of one of its oblique diameters ; but, as the movement of rotation takes place, while it traverses this straight, we may say that it partly traverses this opening according to the oblique diameters, but that when once passed, it is placed in the direction of the antero-posterior and transverse one.

7th. That the head, after having passed through the external organs, generally preserves the position in which it traversed them, and that the movements which it afterwards executes, and which render it at first oblique, then often transverse (movements, called those of restitution by most accoucheurs), are not, as they think, the indication of the return of the head to its anterior relations, but rather the consequence of the motion given to the trunk in the pelvic cavity.

8th. That the body of the fœtus, contrary to the opinion of Solayres, Baudelocque, and almost all accoucheurs, follows, if not completely, at least in great part, the movements, given to the hand in the cavity of the pelvis ; and that the shoulders, which are nearly transverse when the head has completed its movement of rotation after the expulsion of the latter execute a movement of rotation which places them very nearly in the antero-posterior diameter of the outlet, and, at a later period of the vertical diameter, of the vulva ; and that the shoulder which is placed under the arch, is the one disengaged the first.

ERYSIPELAS OF THE EXTREMITIES.

Successfully Treated by Mechanical Pressure. By James Allan, Esq. Surgeon.

Case 1st.—Mrs. H. aged 40, of a sanguine temperament and plethoric habit, complains of considerable pain and heat affecting the whole of the back of the right hand extending about three inches above the wrist, which is much swelled and reddened, pits on pressure, and presents every appearance of phlegmonous erysipelas. Became affected with a rigor and headache yesterday forenoon, shortly after which the back of the hand became painful and swollen. Pulse 100 firm ; tongue white ; bowels confined ; appetite bad ; skin dry.

The hand, wrist, and forearm, the two first particularly, were tightly bandaged and supported in a sling. She was directed to take *Magnes. sulph.* half an ounce, with the same quantity of *Infus. sennæ* every four hours, till the bowels were freely acted on, and requested not to remove the bandage till I should see her again.

Ten hours after. Has scarcely felt any pain these last eight hours ; bandage removed ; swelling and redness nearly gone ; bowels have acted freely from two doses of the mixture. Bandage applied as before, but rather tighter, and the arm supported in a sling ; the mixture to be discontinued.

— *6th.* Has passed a comfortable night, having felt only slight pain occasionally. Redness has entirely disappeared ; swelling scarcely perceptible ; pulse 80 ; tongue white and moist ; skin moist. Bandage reapplied, and a mixture similar to that ordered before to be taken every four hours till the bowels become relaxed.

— *7th.* Pain and swelling entirely gone ; experiences a slight degree of weakness and stiffness in the hand, the back part of which and the wrist are in some places of a livid, in others of a yellow colour. The bandage to be continued a few days longer.

— *9th.* Feels quite well ; desquamation of cuticle going on over the back of the hand. I saw her two days after, when the hand was quite well.

Case 2nd.—Mr. H. aged 46, of a melancholic temperament and spare habit, was seized with a rigor four days ago, which lasted nearly two hours. Complains now of headach, thirst, pain, and swelling of the right foot and ancle, which are in a high state of inflammation, and on which there are several vesications ; redness extends all over the foot und ancle, and about five inches up the leg. Pulse 118, firm and small ; tongue brown and dry ; skin hot and dry ; bowels confined ; has passed three very restless nights, and is confined to bed. *Ft. V. S. ad* oz. xv. *Ung. Cetacei,* spread on lint, was applied over the vesications, and the foot, ancle, and leg firmly bandaged. He was directed to take *Hydrarg. submur.* gr. iii. and *Pulv. antimon.* gr. iv., and six hours after *Magnes. sulph.* oz. i.

— *17th. Mane.* Has passed a confortable night, during the greater part of which he has slept. Since two hours after the application of the bandage he has felt scarcely any pain or burning sensation in the foot. Bowels have not yet acted, the salts having been taken only an hour ago. Pulse 86, weak ; tongue and skin becoming moist ; redness, except on three or four small places, gone ; swelling very much diminished and very unequally diffused, owing to the application of the bandage. A little discharge from some of the vesications, the others dry. *Ung. Cetacei* to be discontinued ; vesications covered with *oxyd zinci,* and the foot, leg, and ancle firmly bandaged

as before, a piece of lint being interposed between the skin and bandage.

Vespere. Felt a considerable degree of pain, which continued nearly an hour after the application of the bandage, since which the parts have felt quite easy. Bowels have acted freely. Bandage removed; redness entirely gone; swelling scarcely perceptible; no discharge from the vesications; feels comfortable in every respect. Bandage to be applied as before.

— 18*th.* Has felt no pain since yesterday. Pulse 76 natural; tongue moist; appetite good; bandage removed; redness and swelling entirely gone; desquamation of cuticle going on; considerable discolouration of a yellow and livid hue on several parts of the foot; a dose of salts and senna to be taken.

— 19*th.* Is walking about and feels as well as usual, excepting a slight weakness of the foot and ancle. Bandage to be continued.

— 21*st.* Feels quite well.

Case 3*d.*,—Mrs. R. aged 54, of a sanguine temperament and rather spare habit; complains of pain and a sensation of burning in the left foot and leg, extending from the toes to nearly the knee, accompanied with violent headache, debility, and restlessness. Disease commenced with several rigors two days ago. Pulse 122, small and firm; tongue dry; skin hot and dry; bowels confined; the foot, ancle, and leg are very red, much swelled, and pit on pressure; three small vesications on the instep. 16 oz. of blood were taken from the arm, a bandage tightly applied from the toes to the knee, and a saline aperient given.

—20*th.* Feels greatly better; pain and swelling nearly gone; pulse 90; bowels open; tongue still dry; heat of skin much diminished; bandage again applied and aperient to be repeated.

—21*st.* Is nearly well, a very slight degree of swelling continuing; pain and redness gone.

—23*d.* Feels quite well; no redness, pain, or swelling; bandage to be continued.

The subject of this case has been for some years occasionally affected with œdema, arising from disease of the heart. I saw her about a month ago, when she informed me that she had experienced no return of erysipelas of the leg, and that her health had been considerably improved since that attack.

I might have added a considerable number of analogous cases, but I consider it superfluous, as all of them have been precisely similar in their results, having treated every case that has come under my care during the last twelve years on the same principle, with uniform success.

It may not be amiss to state, however, that I was led to employ bandages for the cure of Erysipelas in consequence of observing the effect produced by the pressure of my hand continued a few minutes on an erysipelitic surface.

In the case I allude to, I saw the disease after several days standing. Leeches had been repeatedly applied and the part kept cold with saturnine lotion; notwithstanding, the disease extended, the back of the hand became enormously swelled, and began to present a sloughing appearance. The acute stage had evidently passed. I applied my hand with considerable force, and on its removal a few minutes after, the swelling of the part covered with my hand had greatly diminished. I immediately applied a bandage tightly, and on its removal about eight hours after I found the parts nearly well.

In regard to the modus operandi of the bandage, it appears to me that inflammation consists in arterial capillary engorgement, which, when existing to a great extent, produces considerable obstruction to the circulation; that the bandage mechanically diminishes the size of these capillaries and enables them quickly to regain their former size and contractility

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OPTICAL EXPERIMENT.

The following is contained in a letter to the Editor, from Professor Stevelly of Belfast.

"Mr. Patterson, a young gentleman of this town, of very considerable literary and scientific acquirements, and one of the Vice-Presidents of our Natural History Society lately informed me that he had been greatly surprised while walking past the iron railings of our College, and at the same time looking through them at the snow covered country, the sun also shining brightly, and being near the horizon, to observe, that as the rails and open spaces came alternately before his eyes, a very vivid play of colour presented itself to his notice, the shades being chiefly reds and blues; but he thought he also observed other prismatic colours. On the next opportunity I had, the snow, however, being only on the distant hills, I tried the experiment myself, but as I walked at a slow pace, I was nearly supposing that my eyes being very defective were not fitted to make the observation, when I recollected that Mr. Paterson habitually walks very fast; I therefore quickened my pace very considerably, and was much

gratified at observing, *after a few seconds*, that very vivid changes of colour did present themselves to my notice, but the predominant colour to me was a shade of pink, and some dark colours which I could not accurately distinguish alternated with it. The intervention of the opaque bars of the railing at equi-distant intervals was no doubt the cause, and the entire effect would seem to me to prove that the retina takes different lengths of time to be impressed with the several colours sufficiently for the notice of them to be conveyed to the mind, as also that the time during which the retina remains under the influence of the impressions of the several coloured lights after itself had ceased to act is different. If this be the cause of the appearance I have attempted hastily to describe, it can very easily be put to the test of accurate and direct experiment, by an apparatus somewhat similar to the lately invented pleasing illusion, the strobos-cope."

PHLORIDZIN, A NEW SUBSTANCE.

Konninck and Stas give this name to a substance which they have found in the bark of the wild apple, pear, plumb, and cherry. It possesses a yellowish white colour, crystallizes in silky needles, has at first a bitter and then astringent taste. It is soluble in water, very soluble in alcohol and ether, without action on test paper; soluble without decomposition in concentrated sulphuric and muriatic acids. The sulphates of iron colour its solution in water deep brown, acetate of lead produces a copious white precipitate. Lime water, ammonia, tartar emetic, corrosive sublimate, and isinglass have no action on Phloridzin. —(*Journ. de Chim. Medic.* i. 259, NS)

ASHMOLEAN SOCIETY OF OXFORD.

The first memoir printed by this Society is entitled, "On the Achromatism of the Eye. By the Rev. Baden Powell, A. M." &c.

It is well known that when rays of light are inflected by a lens they undergo a deviation, by which they are prevented from concentrating in the same point or focus. This aberration gives origin to the production of colour at the foci of lenses, and constituted a great imperfection in refracting telescopes until the discovery was made, that a compensation for the deviation of the rays of light might be effected by employing compound lenses. Those telescopes in which this improvement was introduced were termed achromatic. Now, as there appears no compensation in the eye for this aberration, it is natural to inquire into the reason of our seeing objects without prismatic colour. Such is the question which Professor Powell undertakes to investigate in the present paper. He presents us first with the opinions of various philosophers in reference to the subject, and then supplies us with inferences drawn from his own experiments. D'Alembert admitted the want of achromatism in the eye, but considered the aberration very small. Euler held an opposite opinion, and Dr. Maskelyne refuted the arguments of Euler. Dr. Wells has observed that the eye has no principle of achromatism, and Sir David Brewster says that "no provision is made in the human eye for the correction of colour, because the deviation of the differently coloured rays is too small to produce indistinctness of vision." Mr. Coddington states that the eye, when employed in its natural and proper manner, is achromatic. The fact is that we see objects without the slightest degree of prismatic colour of indistinctness. The question then is, how can this be reconciled with theoretical consideration? Mr. Powell, by ingenious calculations, has inferred that in such a combination as the eye, exact achromatism is perfectly possible in theory, and that the principle of its achromatism, although not effective in oblique eccentrical rays, may be in general achromatic for direct rays. He gives the results of a series of experiments, in which he has "endeavoured to ascertain directly the actual prismatic dispersions of the crystalline and vitreous humours, by measuring micrometrically the separation of the different parts of the spectrum of a line of light produced by looking through a prism formed of each medium, from the eye of an ox, between inclined glass plates." From which he concludes "that the media of the eye have as nearly as possible those dispersive powers and relations of indices for the different rays, which theory requires for producing achromatism by means of a single lens, when the focus is formed in a dense medium."

ROYAL INSTITUTION.

Comparison of the two theories of Electricity. 3rd April.

Dr. Ritchie stated, that at present there are two theories which have been proposed for the explanation of electrical phenomena. One, which is the simplest theory, supposes that they depend upon the existence of a fluid universally diffused through matter and space, the particles of which repel each other inversely as the square of the distance. If we abstract a portion of this fluid from a

body, the latter becomes negatively electric : while if we add a portion, we produce the phenomena exhibited by positive electricity.

Another theory considers electricity to be a compound substance, consisting of two elements, positive and negative electricity. None of the phenomena are observed until this fluid is decomposed, and then a portion of it goes to the attracted body.

Upon this supposition we can best explain why divergence of the gold leaves in an electrometer should take place in vacuo. Perhaps, the fluid may be the ether, to which the phenomena of light seem attributable. But unless it be a compound fluid. it is not possible to explain the fact, that when a vessel, in which there is a small aperture at the bottom, is filled with water, when it is attached to either conductor of the machine, there is formed a regular stream through the aperture.

Now, if there were two fluids the same appearances should not be exhibited at both conductors. When a bit of wax is attached to either conductor, heated, and then the machine set in motion, the wax is thrown upon white paper held below it, in the form of a beautiful thin film. It is difficult to explain the fact, that when we place a card between two fine points, and discharge an electric jar through them, the card will be pierced opposite to the negative point. The reason perhaps is, that the paper is a better conductor of one of the elements of the fluid than of the other. The card on each side presents the same appearance, which leads to the conclusion, that a fluid has passed through from both sides.

According to the theory of Franklin, the actual particles of matter repel each other, which is contrary to the law of gravitation.

By considering electricity as a compound body we can explain also the electrophorus.

In order to confirm the idea of the existence of two elements, we can by a beautiful experiment separate one element from the other.

If we place two conductors united by their contact with fine points, at a considerable distance from the conductor attached to the machine, charge the machine, and then suddenly remove one of the separate conductors to the electrometer, we obtain a divergence in the gold leaves of the latter. To determine the nature of the electricity which has thus been separated is easily accomplished, by means of a glass rod excited, or a substance covered with a resinous coating.

Dr. Ritchie suggested that by a modification of the galvanometer, base coin may be readily detected. A bad sixpence which he submitted to examination produced a very rapid deviation in the needle. He is of opinion that $\frac{1}{1000}$ of copper mixed with silver might be by this method appreciated.

Dr. Ritchie endeavoured to afford an explanation of Dr. Faraday's experiment, in which, the spark was elicited in a long wire, by the consideration, that one particle of light does not communicate light. Now, in the long wire the quantity of electricity was smaller than in the short wire, but took a longer time to arrange itself.

The able lecturer exhibited an electro-magnetic machine, in which he had devised some improvements, by which combustion and decomposition can be as readily effected and more conveniently than with a voltaic pile. This affords an excellent instrument for class room experiments.

GREATEST ASCENTS IN THE ATMOSPHERE.

M. Boussingault, in company with Colonel Hall, on the 15th of December, 1831, ascended Chimborazo, to the height of 6,006 metres (19,699 feet) the greatest elevation which has yet been attained on land, Humboldt having been able to reach as high only as 19,400 feet. M. Gay Lussac, in a balloon, rose to 22,900 feet at Paris. The barometer carried by Boussingault fell to 13 inches 8 lines. The temperature in the shade was 7.8 C (45 60 F.) This chemist thinks it possible to live in rarified air. Thus, at a height almost equal to that of Mount Blanc, where Saussure had scarce strength to consult his instruments, young women may be seen in South America, dancing during the whole night. The celebrated battle of Pinchinca during the war of independence, was fought at a height, little inferior to that of Mount Rose. The guides who accompanied Saussure, assured him, that they had seen the stars in broad day. Boussingault never witnessed them, although he reached a much greater altitude.—(*Journ. de Chim. Medic.* i. 33. N S.)

MR. WHEATSTONE ON SPEAKING MACHINES.

8th May.—Mr. Wheatstone gave an account of the different attempts which have been made to invent speaking machines from the time when the oracular responses were delivered at Delphi, through the period when a speaking head was exhibited by the Pope towards the end of the 10th century, and others afterwards, by Roger Bacon and Albertus Magnus, with the impositions which were practised upon the credulous, to the present time when the principle of a speaking instrument has

been developed by Mr. Willis. Van Helmont was one of the first persons who wrote upon the adaptation of the organs of voice to the articulation of the letters. He considered that the letters of the alphabet constituted the order in which articulate sounds were naturally produced, by the structure of the tongue and larynx; that when one letter is uttered the tongue is in the proper position for the pronunciation of the subsequent one. By attending to the circumstance, that several different sounds are formed, merely by raising or depressing the tongue slightly, as in the sounds Aw, Ah, Ae, A, E, it was easy to produce them by means of a tube with a reed and terminating in a bell. Mr. Willis also effected the same object by using a long tube with a reed, adapted so as to be capable of being lengthened or abbreviated at pleasure. He found, that in the pronunciation of the vowels, i, e, a, o, u, it required to be shortest with the first, and in uttering the subsequent letters to be gradually lengthened. In this way, it was easy to measure the length necessary for each note. When Ae was pronounced, the tube was 1 inch long, Aw 3.8 inches, Ah 2.2 inches, A 0.6 inch, E 0.3 inch.

Mr. Wheatstone exhibited a copy of a speaking machine which was invented in Germany, and afforded a specimen of its vocal powers. The words, *mamma, papa, mother, father, summer*, were distinctly pronounced. The instrument consisted of a pair of bellows, to which a tube is adapted, terminating in a bell, the apertnre of which is regulated by the hand, so as to produce the articulate sounds.

COMMUNICATION BY EGYPT TO INDIA.

The subject of a short communication to India has been so much before the public of late, that the following tables of distances will not be unacceptable:—

	MILES.
From Bombay to Aden	1646
" Aden to Suez	1323
" Bombay to Socotra	1137
" Socotra to Camaran	835
" Camaran to Cossair	795
" Cossair to Suez	270

	MILES.
From Alexandria to Malta	837
" Suez to Quaherah	70
" Quaherah to Alexandria	120
" Suez to Boulac	80
" Boulac to Alexandria	185

	DAYS.
Falmouth to Malta, with 2 days at Gibraltar	16
Delay at Malta	2
Malta to Alexandria	6
Alexandria to Suez	6
Suez to Aden	8½
Delay at Aden for coals	2
Aden to Bombay	10½
	51

Compare this with the route by Cossair:—

	DAYS.
Bombay to Aden	10½
Delay at Aden	2
Aden to Cossair	6¾
Cossair to Coptos	4
Coptos to Boulac by water	8
Boulac to Alexandria	3
	34¼

(*Wilkinson's Thebes.*)

The number of days from England to Alexandria being 24, it appears, from these computations, that the route from Alexandria to Bombay, by Suez, would occupy 27 days, while by Cossair it would require 34¼ days; but if steam boats were employed on the Nile between Coptos and Alexandria, instead of the country boats as at present, the latter route might be reduced to 29 days. The line by Suez, therefore, has the advantage, even if this improvement were made. We are inclined to recommend this mode of communication as possessing advantages which neither the route by the Nile or Euphrates possess. The latter will be attended with almost insuperable difficulties, and appears to us chimerical in the present barbarous state of the country.*

CORRESPONDENCE.

ON THE MANAGEMENT OF INDIAN JAILS.

We understand that, besides distributing Mr. Hutchinson's work on the management of Indian Jails among the civil surgeons, Government have sent circulars to the Magistrates calling for reports upon the same subject, with reference to the advantages of solitary confinement over the present system. It has therefore become a topic of some interest and discussion in the Mufussil: the following communication from our able correspondent D. W., must be acceptable.

* We beg to observe that this is not our opinion; we have no doubt that every obstacle by the route of the Euphrates will be overcome. *Ed. India Journal of Medical Science.*

Sir,—I observe from your October No. that you have postponed the continuation of your review of Mr. Hutchinson's work on Jails. The book itself has reached me within the last few days, and I am desirous of offering a few observations, on a subject so interesting to Medical men; particularly to those who, like myself, are in medical charge of Jails. I shall follow Mr. Hutchinson in arranging my remarks, under the heads of Housing, Working, Dieting, and Clothing of the prisoners; their Diseases, and the comparative mortality among them.

Housing.—Our worthy Secretary, since he has become a dweller in the City of Palaces, appears to have imbibed exalted notions on the subject of Housing. In talking of the number of cubic feet required for each prisoner, he does not take into consideration that the jails in this country afford little shelter, except against the sun and rains. The 'liberal air' blows through them in all directions. The walls are all doors, and the doors are not doors but large air holes 6 feet by 4, or thereabouts; and yet he would have "the side walls on each side of the beams perforated to allow the heated air to escape!" Panelled doors, to keep the cold wind out, are much more urgently required than ventilators, particularly for Hospitals; and in all that he says about panelled doors and boarded cots I agree with him most cordially. "Mani bus et pedibus descendo in suam sententiam?—

I do not deny that *upon occasions*, prisoners are ill housed, improperly worked, and ill fed. For example, I have known prisoners sent away from their jails to work upon the roads without tents, and as already stated prisoners are sent who are unfit for that kind of labour. In seasons of famine, the 3 pice may not be sufficient, and though the total daily allowance may be enough, yet their meals may not be properly regulated. Thus in these respects there is great room for improvement every one will admit. What I maintain and hope I have proved is, that prisoners are not in the miserable condition, compared with common labourers, that Mr. Hutchinson would lead us to suppose.

Working.—"The impression is strong in my mind," says Mr. Hutchinson, "that the prisoners are overworked," and that many of them are destroyed in consequence. You again, Mr. Editor, "are satisfied that the prisoner's life as regards laborious duty is a life of luxury compared to the Sipahi's at some stations." The friend of India in his very last note No. 58 avers that "notwithstanding the outcry that has been made of late years about the heavy duty that falls upon the Sepoys, consequent upon the reduction of their numbers, their labor is not half so great as that of a peasant, police officer, or some description of servants." These are three authorities of some note, but in the present instance not of much value. It is idle arguing about the length of time that the prisoners are at work or rather that they are out of jail. Often in former days have I seen them and their guards, for many hours at a stretch, sleeping under the trees in my own garden. Not very long ago, I observed several of them 'gaying on the brook that bubbled by' with something marvellous like fishing rods in their hands!—Task work is now pretty generally introduced. Let us know in cubic feet the amount of work performed by prisoners, and by common labourers, and we shall have facts to base our judgment upon. Some prisoners are at work on a road near this. Their task is about 80 cubic feet each in the cold weather, 60 in the hot winds, and something less in the rains. They do not work on Sundays nor in bad weather. Every prisoner who is fit for such kind of labour accomplishes his task with the greatest ease, and could do so if he likes before noon daily; but they will not exert themselves to get their work over early, for the same reason perhaps that is said to prevent monkeys speaking; they are afraid 'master' will give them more work to do——I do indeed see among these prisoners, old infirm men and totally unfit for hard labour and exposure, and who ought to have been kept in jail and employed upon such work as that recommended by Dr. Lamb and Mr. Burt. No prisoners whatever should be sent out in tents upon the roads till they have been passed as effective by the medical officer. I have long since seen the necessity of this, and have more than once mentioned it to the higher authorities, but without effect.

I should like to let you know what quantity of work is usually obtained from a common labourer, but I have no native at hand who could give me such information as I could depend upon. I may however quote some remarks of Col. Pasley's on the tasking of Military working parties, and leave you to make what allowance you please for natives of India and for prisoners. "By repeated experiments at Chatham, tried with the utmost care, we found that a portion of parallel of the dimensions above stated, which involves 261 cubic feet, or 9 $\frac{2}{3}$ cubic yards of excavation, may be completed in an average of five hours per man in soft soil which re-

qu'res litttle or no picking, and on an average of 9½ hours per man in hard soil. The most difficult which we could possibly find in this neighbourhood, which consisted of a concretion of flint gravel, sand, and clay, required an average of 10½ hours" * * * "The sappers employed in these experiments were generally artificers not previously inured to labour with the pick-axe and shovel, until they joined the establishment, and not by any means more robust men than the British Infantry usually are" * * * "In these experiments, the men were tasked individually, and in all cases some got through their work in nearly half the time of others; but in the very worst soil, the time of the slowest workman did not exceed 13½ hours" * * * "the above will amount to 93¾ cubic feet of excavation, which may be executed by able bodied men, with moderate exertion, in from one hour and three quarters, to three hours and a half, or four hours at the utmost. It really would be trifling with the Service, to allot a smaller task than the above to any set of men, deserving the name" p. 58. 59.

Dieting.—It appears to me extraordinary, that Mr. Hutchinson should have advanced the statements he has done on this subject, aware as I am of his long experience in the Moofussil, and the superior opportunities he had, in his judicial capacity, of ascertaining the circumstance of the labouring classes. Artificers may and do earn as much as he mentions (4 rupees a month), but common labourers do not get more than half. Garden coolies and grass-cutters here, get two rupees a month. It is possible that they do keep themselves to some vegetable and gram: The labourers employed by Indigo planters, however have not this in their power, and what is their hire? Two rupees a month for ploughmen, five pice a day for the best day labourers, and 1, 2, 3, or 4 for children, old women, and lads, according to their capabilities. In bad weather, or when they can get no work what do these people subsist upon?—The Dhangurs are employed at almost every indigo factory, and at hundreds of miles from their homes. In the manufacturing season, when at work in the vats, at the boilers, and in the press house, they get three rupees a month, and when hoeing, weeding &c. 2½—I know of some being employed here, at the present moment, upon two rupees. These men not only subsist upon such pay, but send much of it to their homes, and even become rich. This does not appear surprising when we enquire what their maintenance costs them. In this part of the country the ordinary fare of the better class of labourers and of peons, bearers, &c. is ⅜, ½ or ¾ of a pucka seer (80 sa. wt.) of rice, ⅛ of a seer of dâl, and about a tola of salt. These are the essentials, and cost at an average not more than 3 pice a day, or one rupee and two annas a month—Were their food to cost more, how could they possibly support their families? Many cannot afford to purchase so much rice, and add a quantity of herbs gathered from the fields, or the common bazar vegetables ——Those who work hard generally eat something in the forenoon—parched gram, or chubena, or suttoo mixed with water. One pice worth of suttoo or about 5 chittacks is an ordinary forenoon allowance, and those who take the suttoo, will eat 8 or 10 chittacks of rice at their afternoon meal. Farther down the country, parched gram probably supplies the place of suttoo which must there be expensive.

When the prisoners here were put upon rations, the allowance adopted was ¾ of a seer of rice, or otta, ⅛ of dâl, and a tola of salt. They having the option of exchanging part of this rice for parched grain in the forenoon. Lately an alteration was made in the rations of one gang as an experiment—These get

10 Chittacks of otta or rice,
2 do. of dâl (urhur dâl on Sundays),
1 Tola of salt, 1 of oil, and 1 of tobacco,
1 chedam for wood, and ½ chedam for turmeric and pepper. This was intended as an improvement in their diet, and appeared to me to be so at the time. I have not seen the gang since, but will visit them in a few days, when I shall find out, how the prisoners like the change, and whether or not it is a beneficial one. If the above be not reckoned a fair allowance, will Mr. Hutchinson or you state what you consider sufficient? The prisoners themselves do not complain of the quantity being too small, though they will complain loudly if the quality be exceptionable. Till I read Mr. Hutchinson's book, I had not a doubt that the prisoners received an ample supply of food. I still think they do, though his warmly expressed assertions, that they do not, have somewhat shaken my confidence. I shall not be satisfied till I have ascertained, that they are *better* fed than the labourers of the country; it being allowed that the convict requires more food than the free labourer.

I have frequently heard it said that when grain is dear, poor people do, or *did*, commit crimes, with the view of getting into jail. It is well known that prisoners save money in jail and equally notorious that they bribe their guards. This does not look as if they were starved. They are apt indeed to use inferior food, that

they may save their pice for other purposes. These evils are removed or at least greatly corrected by substituting rations for money; and I am told by the best authority, that the prisoners here consume more food now, than when they received pice.

To prove "that the present allowance is far too smal" and "miserable in the extreme" Mr. Hutchinson refers to that of the lunatics "who are fed in the most ordinary, and in the cheapest manner, and who cost the Government upwards of two rupees per mensem each." I cannot allow any force to this argument till I know what these lunatics eat. Supposing the 'upwards' to be a quarter of a rupee, the allowance to the lunatics, at the usual rate of exchange 20 gundas to the rupee, amounts to exactly 6 pice a day for a month of 30 days, or double the quantity eaten by a hard-working ploughman. —Mr. Hutchinson then proceeds to state that Mr. Kean's abstract shews, "that the Mussulmans, who use a comparatively generous and invigorating diet, are much less subject to sickness than Hindoos." The proportions are 1 Mussulman sick in 23½, and 1 Hindoo in 13. The allowance, however, is the same to both; and as Hindoos are less expensive in their diet than Mussulmans, the 3 pice is comparatively a more liberal allowance to them, than to the others: the argument, therefore, if it be good for any thing, it is to show, that the greater sickness among the Hindoos can *not* be attributed to want of food.

Clothing.—Upon this subject I have little to remark: the prisoners appear to me, to be as well clothed as people in their grade usually are. Mr. Hutchinson should have stated that in the upper provinces (Benares for example) two blankets are served out yearly to each prisoner.

I am compelled to postpone further remarks for a few days, or till next month, or some future period. I can by no means accord with Messrs Hutchinson and Cheek on the subject of these ulcers; neither do I think the greater mortality among prisoners than sipahis is yet satisfactorily accounted for: but of this anon.

D. W.

Moofussil, 19th Oct. 1835.

MISCELLANEOUS.

MEDICATED HOP PILLOW.

The beneficial effects of Hop as an aromatic, bitter, astringent, tonic, and anodyne has long been acknowledged: indeed, its latter property was so generally known that a pillow of hop became a popular expedient to quiet nervous irritability and procure sleep. Dr. Chapman states in his work on the elements of therapeutics, that Dr. Willis prescribed its use in the insanity of George the third. Dr. Thomson alludes to the same fact. Dr. Eberle in his treatise on Materia Medica states, that the hop pillow procures sleep, and Dr. Redman Coxe assures us that recent experiments confirm the assertion. Mr. Turner, we know, prescribed a hop pillow for the use of the late Governor General in preference to administering anodynes internally. These facts at least shew that the hop pillow is deserving the notice of medical men in India, as being useful for men of nervous and irritable habits. We are therefore glad to learn that these pillows, of the very best quality, are now procurable in Calcutta.

TO INVALIDS.

We have seen a letter from an invalid whom we sent home in March last, when he had been so reduced by hepatic and dysenteric affections as to require great caution in his diet, stating that he found the pulverized milk, prepared by Mr. Previte, of essential service, not only as a luxury but as a means of restoring his debilitated constitution to health. To conceal such intelligence as this, would, we conceive, be to neglect the duty we owe to the public.

THE UPPER ORPHAN SCHOOL.

It may be in the recollection of those who had the patience to wade through the proceedings of the general management of the upper Orphan School, that the two Mistresses of the young Ladies were superceded by the appointment of a Lady as head mistress, who had then recently arrived in Calcutta. We were ourselves one of the management at the time, and we objected to the supercession, not only because the measure was not necessary, but also on the ground of inexpediency as regarded the expense, in which the appointment of an additional mistress would involve the

institution. To shew that the incumbent head mistresses were efficient, the Deputy Governor Captain G. Young had offered his opinion on their qualifications and merits when the question of supercession was first mooted. He then observed "Miss Sturrock and Miss Cumming were appointed head mistresses as an experiment. Four years, is a long time for such an experiment, and we have testified our approbation of their conduct by gifts of watches and Scott's Bible." Captain Ousely, although proposing the appointment of a head mistress, bears the same testimony to their merits. They appear, he says, "*to have discharged their duties zealously, and performed faithfully all that could reasonably have been expected of them: in my opinion, they deserve great credit* for what they have done, and at the proper season I shall be very ready to join in any vote of the General Management to evince its sense of their merits." Mr. John Tytler concurred in the above opinion, as will appear from the following extract from his minute. "It does not appear to me that any *vacancy exists* in the Female department, and consequently it is quite needless to agitate the question of a lady superintendent. When Mrs. Hovenden retired some time ago, Miss Sturrock and Miss Cumming were elected to succeed her, and have continued to discharge their duties satifactorily ever since, receiving, I believe, one half of Mrs. Hs.'s salary; unless, therefore, we choose to turn them out, which would be the highest injustice, there is no reason to put any one else in."

Notwithstanding all these high testimonials in favour of these ladies, they were superceded, and the institution put to an additional expence of 3000 rupees per annum. Since the supercession, we learn the system, in the internal management of the school, has not worked quite so smoothly as before; the cause of which has been ascribed to the dissatifaction of one of the ladies superceded. Although this lady had been in the institution from the age of seven years, she has, notwithstanding, been removed. Her full salary has however been continued to her until she obtains another employment. The natural inference from this measure is, that she could not have been much in the wrong; for otherwise she would not have been allowed this indulgence. The whole affair at least shews that the General Management have not acted judiciously in disregarding the claims of those who have for a number of years faithfully served the institution, and further that they are not over careful of its funds.

MEDICAL AND PHYSICAL SOCIETY'S MEETING,*

Saturday November 5th 1835.

Mr. CORBYN in the chair.

Mr. Hough superintending surgeon and Allen Webb esquire, were elected members of the society. Dr. Stewart of the Bombay establishment, Messrs Brydon and Cantor of the Bengal establishment, and Mr. Hughes of the Madras were proposed as members. Mr. Brassey has returned to the society and Mr. McGaveston has withdrawn from it.

A communication was read from Mr. Irvine describing a case of compound wound of the head, and another of the dislocation of the lower jaw. The elements of the theory and practice of medicine by Dr. G. Gregory was presented for the library by the author, also a preparation of a morbid portion of the ilium of a tiger in a state of ulceration for the Museum by Dr. Benza. The following original communications were also presented:

"An account of two cases of Tumor successfully removed by operation, by William Bell, Esq. Assistant Surgeon, Almorah. Further cases of cholera treated by Tartar Emetic and other remedies, by T. Chapman, Esq. Assistant Surgeon, Purneah. Memorandum of a post-mortem examination of a Tiger, which died of inflammation and subsequent ulceration of the intestines, by P. M. Benza, Esq. M. D. An account of an instrument constructed by him and denominated the electro-magnetic Rotator, by R. Tytler, Esq. M. D.

The following communications were then read and discussed, viz:

* This report is inserted at the end of our present number, because it was not published by the Secretary until the foregoing sheets had been printed off. We therefore trust no disrespect will be attributed to us on this account.

Observations on some diseases of European Seamen in Bengal, by D. Stewart, Esq. M. D. Cases of cholera treated by Tartar Emetic and other remedies, by T. Chapman, Esq. Assistant Surgeon. The history of a fatal case of extensive disease of the spleen, by J. Eccles, Esq., Assistant Surgeon.

Dr. Stewart states that having had his attention directed during the past ten months to the effect of tropical diseases upon European sailors, he was so forcibly struck with many of the peculiarities attendant upon them, that he was anxious to derive the advantage of the opinion of his medical brethren upon the subject. The number of cases treated by Dr. Stewart from the 1st of Nov. 1834 to the 1st of Sept. 1835 was 244, of which all, except 3, were white men recently arrived, and the majority of them suffering under acute diseases. The number of deaths was 14.

The diseases which Dr. Stewart made the subject of his remarks were chiefly fever and dysentery. In the first place he stated that he had observed a striking difference in the susceptibility of disease and the capability of bearing depletion existing between the officers and common seamen. This he attributes to difference of diet, and to the mode of life, which these two classes of seamen follow during a long voyage. The advantage being of course much in favor of the officers, they are consequently much less liable to severe tropical diseases; but when attacked by them they both require, and will bear blood letting to a much greater extent than the common sailor. With the former, Dr. Stewart inculcates the employment of a very bold and unsparing antiphlogistic treatment, whilst in the latter, he states that it must be used with singular caution; for the effect upon them is frequently most injurious, although at first sight they would appear imperatively to require venesection to a large extent. Their powers of life are weak, and the check is often too great for them to bear; in these cases an opiate with the usual calomel pill should be given on the first night, before any purgative is administered, the latter being deferred till the following morning, when a good night's rest will have enabled the patient to bear it with safety. In the cases of common sailors, venesection cannot with propriety be performed at the 3d day of fever, nor with safety even on that day, if it has been already once used; a very few ounces of blood taken late on that day or on the decline of the paroxysm, will be highly dangerous, and not unfrequently prove fatal. In addition to the other bad consequences of these untimely bleedings, it sometimes happens that purgative medicines which have been given during the day, and which have hitherto produced little or no effect, now begin to act with violence, and destroy the patient. In such unfavourable circumstances the strength must be supported by spiced sago or some other light nourishment. When depletion is absolutely necessary at this stage of the fever, leeches are much safer than general blood-letting. Dr. Stewart thinks blisters occasionally do mischief by being employed too early, before active congestion has been relieved, and the *primæ viæ* thoroughly cleared.

He conceives blistering to be useful in promoting the action of the capillaries, stimulating the absorbents round the great cæliac centre, to carry off serous effusion, which he considers always to take place in every paroxysm of fever. The crackling feel and crepitus, which may be perceived by placing the hand flat on the abdomen during the decline of a long paroxysm Dr. Stewart considers to depend upon this serous effusion; this sensation is said to disappear entirely under the stimulus of a large mustard plaister, and minute doses of calomel and colocynth. Blisters and calomel are decidedly injurious, if used before the action which they are intended to replace has subsided. Dr. Stewart has seen them highly deleterious in dysentery, when sufficiently vigorous antiphlogistic measures have not been premised, and the practitioner has trusted entirely to salivation and blistering. The periodicity which is remarkable in the cases of the older inhabitants of Bengal does not characterise the diseases of seamen as far as Dr. Stewart's observation goes. Seamen newly arrived in Bengal are free from fever which may be called essential, and suffer always from those which are symptomatic of, or which are accompanied by distinct local inflammation. The cases of intermittent fever in the Howrah Hospital were old standing agues, and not fevers of recent date.

The seat of congestion in fever is of course liable to variation. The worst cases of fever are those which arise from exposure to the sun, continued fatigue, wet and cold combined, as was the case with some of the ships which left this port in the wet, sultry, and stormy months of July and August last, and returned leaky. In the cases admitted from these vessels, the head was the organ principally affected, but though the cerebral symptoms were severe, the skin was cool and moist; the pulse not quick or hard; and weakness and headache were all that the sufferers complained of. The lancet was of course inadmissible in such cases and the treatment consisted in instantly shaving the head, giving a scruple dose of calomel, and

after a tepid bath, leaving the patient undisturbed for six or eight hours ; he could then bear twelve or sixteen leeches to the temples, and a purgative of pulv. jalap comp. ; after which 1 grain of ca omel and $\frac{1}{8}$ of a grain of antimon. tart. and 5 or 6 grs. of cathartic extract was usually given every 3 hours, until it was time to purge again. In such cases continued and copious catharsis is to be avoided at first, the exhausted powers of life will not stand it. The second day is the critical one, either a marked reaction takes place, and if so the case may be considered comparatively safe, while leeches, calomel, and colocynth are at hand or the collapse continues, a low delirium comes on, and the case makes a very close approach to typhus fever in its worst stages.

The question io be decided is, whether the cerebral disturbance arise from arterial action, venous congestion or serous effusion on the surface of the brain, a point, which it is often extremely difficult to determine. Dr. Stewart points out the distinguishing marks of these separate states, and proceeds to speak of the appropriate treatment. When the serous effusion is clearly established, blisters large and general, are necessary. Calomel and colocynth in repeated doses, mercurial frictions to promote absorption, and quinine to support the strength. By proper treatment he has seen more than one case recover, in which effusion had actually taken place. Opiates are rarely of use. The only admissible sedatives are hyosciamus and camphor.

Dr. Stewart next points out the distinction between the constitutions of different classes of seamen. He states that there is a certain class of men, chiefly Swedes and Danes ; men with flaxen hair, light eyes and pale skin, of an encolic temperament who are very bad subjects for tropical disease. In their fevers the congestion is short and violent, the determination greatest to the head, there is also congestion of the glandular system and inflammation of the mucous follicles. In dysentery these people have an early proclivity to hemorrhages and the ulcers on the colon are found on post mortem examination to be large and flat, not small, round, and deep like those in firmer habits. In inflammation of the liver the tendency is to deep abscess, and in that of the spleen to soft enlargement and dropsical effusion. The nervous system is always disturbed from the commencement, whatever the ailment may be. They don't bear V. S. well ; mercury has a very powerful, and sometimes unmanageable effect on them."

Mr. Corbyn observed that the paper just read was of vital interest to the profession. It was a remarkable fact that none of the surgeons, attached to the number of ships that came to Calcutta of late years, published their medical practice among British seamen. If the sanatarium at Howrah had afforded no other proof of its utility this important communication of Dr. Stewart's was sufficient to induce every friend of the Medical profession to rejoice at its establishment. Dr. Stewart had drawn a very proper distinction between the constitution and habits of seamen coming from long voyages and those of soldiers who were better fed, clothed, and accommodated ; whence he deduced the necessity of a difference in the treatment of these classes of patients. On the ground of these facts Mr. Corbyn adverted to the difference in the constitutions and habits of the European soldiery in India, which required the same discrimination in order to ascertain a successful management of the diseases which appeared among them.

The characters to which Mr. Corbynallud ed were the plethoric and of sober habits, and others whose constitutions were emaciated, still retained apparently fine complexions by hard drinking. Those of the latter class to all appearance were plethoric ; and, if examined, were generally found to be bloated—the eyes red from apparent determination to the brain. These appearances the discriminating Regimental surgeon knew to be mere congestions, the effects of ardent spirits. In these there would also be a fulness of pulse : this was not however the effect of inflammation but of stimulus. To treat these cases by copious bleeding, would be fatal to the patient. Mr. Corbyn was therefore glad to find that Dr. Stewart used so much discretion in his treatment of European Seamen. He concurred with him in his conclusions that the treatment of these cases in which determination of blood and inflammatory diathesis really existed, demanded at the onset copious bleeding : but that, after the fever had existed three days, bleeding was prejudicial. Mr. Corbyn's experience had taught him, that bleeding in the first instance must be bold and decisive or it would be better not to bleed at all. Mr. Corbyn concluded by observing that this paper did Dr. Stewart great credit and would no doubt be deemed a valuable article for publication in the Transactions of the Medical and Physical Society. The paper next read was Chapman on Cholera of which the following is the secretary's abstract.

" Mr. Chapman's cases of Cholera were reported at two periods, some of them in May last, and the rest in October. The first case was that of a prisoner in the Purneah jail, 21 years of age, of delicate habit suffering

from a pleuritic affection. At 10 P. M. he was seized with purging and vomiting of watery fluid, pulse weak, skin cold, eyes sunk, slight spasms of the lower extremities and great prostration of strength; half an ounce of the following mixture was administered every two hours; tartarized antimony 10 grs, spirit of wine, half an oz., water 8 oz. The first dose produced a good deal of nausea, increased prostration of strength, and excessive thirst. At 12 P. M. the pulse was scarcely perceptible. He was then allowed toast and water *ad libitum*, and from this time the purging abated much, he improved fast, and by 8 o'clock the following morning he was free from all unpleasant symptoms, except a little debility; even the original pleuritic affection was entirely removed. He took in all six doses of the solution, and after the first 2 hours, the patient drank as much toast and water as he desired, but no urine was passed notwithstanding the quantity of fluid which he swallowed. Mr. Chapman considers that this case affords strong proof in favour of the tartar emetic plan, and he is astonished that his simple remedy has fallen into disuse in this country. He then proceeds to offer a theory of the action of the tartar emetic in this disease. He states that the principal object in the treatment of cholera is to restore fluidity to the inspissated blood, and he conceives that the tartar emetic tends to effect this desideratum by producing a state of the body highly favorable to absorption, viz. a degree of nausea in which the lost constituents of the blood are rapidly taken up, by which it is thereby restored to its original fluidity. To aid this effect it is necessary to present some liquid to the absorbents, upon which they can act; this liquid may either be water alone or combined with some saline ingredient. He is the more inclined to entertain this opinion from observing that in the foregoing case the tartar emetic was inefficacious, until the patient was allowed to drink as much fluid as he wished. He admits however that *a priori* the theory of the action of tartarized antimony is not borne out by the effects usually observed in the employment of that medicine.

Mr. Chapman was confirmed in these views by the occurrence of another case somewhat similar to the one detailed above; in the case alluded to vomiting took place, only once after the antimony had been administered. Toast and water *ad libitum* was again given, no urine passed, and the patient recovered without the aid of any other remedies.

In Mr. Chapman's second communication he states that the total number of cases which were treated on the tarter emetic plan was 30, of whom 12 recovered. They appear to have been, upon the whole, rather of a slight character, and none of them were marked by any great severity of symptoms. He says that the nausea produced by the tartar emetic had the effect of checking both purging and vomiting, and of allaying the irritability of the stomach to such a degree that the patients were enabled to drink water to any extent without exciting vomiting or retching. Urine was not passed till at least 8 hours, and frequently not until 24 hours had elapsed, after the urgent symptoms of the disease had subsided.

The weak and emaciated require a weaker dose to the feebleness of Mr. Longford's mixture should be given every two hours, and to the stronger patients the same quantity may be safely administered every hour, and repeated in each to the 3d or 4th time. From the total number of fatal cases which occurred Mr. Chapman is disposed to feel less confidence in the tartar emetic plan than he did, when making his former report; yet he considers it may be still worthy of a trial in certain modifications of the complaint; what those modifications are, he cannot pretend to say. At any rate, the only state in which it can be given with safety is in the first stage, if delayed beyond the first 2 hours, it is useless.

Mr. Chapman then relates, that he found temporary benefit to ensue from the use of common salt in solution in a case which had resisted the tartar emetic; and although the man eventually died, he was induced to make trial of it in several other instances, apparently with considerable advantage In administering the saline solution, he found it advisable to limit the quantity of fluid taken by the patient to a very small portion as it appeared to interfere with the action of the salt; this being the reverse of what took place in the administration of tartar emetic."

Dr. Goodeve, in commenting upon the cases brought forward by Dr. Chapman, observed, that it was the first time he had heard it asserted that Tartar Emetic would promote absorption: he thought rather that it would tend to weaken the functions of the stomach: stimulants on the contrary tended to excite the absorbents.

Dr. Stewart remarked that the use of emetics at home was confined to the cold stage at the setting in of cholera: that it was then employed, and he understood from his friend Mr. Brydon, that Tartar Emetic hot baths were also employed in some London Hospitals with the view of determining to and acting on the skin. Dr. Spencer of New York in the last vol. of the Transactions of the Medical So-

ciety of that place has taken a different view of the *modus operandi* of Emetics from Dr. Chapman's. The spasms of the muscles employed in the act of vomiting by compressing the intestinal exhalents tended to arrest the discharges, and stimulated the heart to redoubled exertion, causing a metastasis of the exhalation fron the inner surface to the skin. Dr. Stewart was of opinion that it was only in case of colic collapse without perspiration which was now the general character of Indian cholera, the remedy was admissible.

Dr. Jackson thought that the society must feel greatly indebted to Dr. Chapman for the communication.

Mr. Corbyn observed that the information Dr. Chapman had communicated was of great importance: it proved that the Tartar Emetic, altho' successful in the first solitary case, failed as a remedy in the succeeding, and it taught a salutary lesson to the medical practitioner, that he was not to rely on the use of any one remedy as a specific. There was no disease which required greater discrimination in the use of remedies in its several stages than Cholera. —Dr. Chapman said that opium and stimulating medicines might have succeeded had they been prescribed in those cases which had proved fatal.—Mr. Corbyn thought differently. It was in fact impossible to arrest the progress of the disease by stimulants, and their use only hastened dissolution. Mr. Corbyn was therefore glad to observe that Dr. Chapman had wisely refrained from prescribing them; but he administered occasional doses of calomel and freely purged the patient* when he found the exclusive use of Tartar emetic unavailing : the result was, that his patients were restored to health. Dr. Chapman had in the first instance allowed cold water *ad libitum* but in the latter case, warned by experience, he did not sanction the indiscriminate use of this beverage. Mr. Corbyn called the attention of the meeting to this fact, and observed that the greater the quantity of cold water drank in Cholera the more it was called for : the stomach became distended in consequence and rejected not only the water drank but the remedies also. The imprudence of the indiscriminate use of cold water was therefore obvious. Dr. Chapman had also alluded to the use of muriate of Soda. Mr. Corbyn had witnessed much good from its use. He had been in the habits of giving congee as a beverage well saturated with that article, and he allowed his patients to drink freely of it. In this way the muriate of soda tended to act upon the bowels, and he did not find that it aggravated the thirst—an effect to be apprehended from its use.

"The subject of Mr. Eccles' case was a Gunner of Artillery, aged 23 years, admitted on the 3d December 1834 ; he had been subject to intermittent fever, and the spleen was much enlarged, but could not be distinctly felt ; there was great tension of right Hypochondriac region, and of the lower part of the abdomen ; oppressed breathing, dull pain in the region of the spleen, pulse natural, tongue brown. He was purged, twenty leeches were applied to the left side, and pills of Pil Hydrarg. Ferri Sulph. Aloes, and Ext. of Colocyuth were given night and morning. On the 2d the leeches were repeated, and again on the 3d ; 10 drops of Tincture of Iodine and of Hyosciamus were ordered to be taken 3 times a day. On the 5th the swelling and tension were diminished. On the 7th he had a slight paroxysm of intermittent fever, and the pain in his side increased ; twenty leeches were again applied, but these not affording relief, and his pulse being hard and frequent, and his respiration oppressed 58 oz. of blood were drawn from his arm with considerable relief, and afterwards 30 more leeches were applied, and 2 grains of calomel with half a grain of Ant. Tart. given every hour.

On the 8th he was much relieved, and able to take a full inspiration, was well purged, and had a soft pulse ; the abdomen was much swollen. The Calomel and Ant. Tart. were continued, and a blister was applied in the evening.

On the 9th he was worse, the respiration oppressed, and the countenance pale and anxious, he complained of great exhaustion; mouth slightly affected by the calomel ; he grew worse during the next day and expired on the 11th. On opening the abdomen a reddish fluid, mixed with pus escaped, adhesions of long standing were found between the spleen and the viscera. The spleen weighed 5lb. 8oz. Its organization was much altered ; when cut it presented innumerable small tubercles. The liver had no lobes apparent ; was of a light color, and of the consistence of cartilage."

* The secretary in his report does not allude to these particulars.

ERRATA.

In page 423 of our last number, in Mr. McCosh's paper for *Biddingfield* read *Beadingfield ;* for *Boulton* read *Burlton :* line 28, for *and whole day rain* read *and a whole day's rain.* Page 423, column 2, line 28, after the first figure 3 put a comma. Page 424, column 1, line 11, for *put up* read *pent up.*

TO CORRESPONDENTS.

The following communications will appear in our next.

Sketches of the Edinburgh Medical Professors by SCOTUS No. 5.

Essay the 1st on Intellectual and Corporeal action by N. O. P.

Hospital practice in the Hospital of the 2d or Queen's Royal Regt. on Bronchitis, acute Bronchitis Chronica. Asthma &c. &c.

Dunbar's case of abscess in the Right Hypochondriac region.

Third Clinical report of the General Hospital, Calcutta, by D. S.

The following communications have been received.

The case of a Tumour originating above the right breast in a Nepalese lady of high rank by Dr. CAMPBELL. The drawing which accompanied the communication is being drawn on stone—The paper and drawing shall appear in our February number.

A case of diseased bladder by Mr. W. A. GREEN, shall have early insertion.

We have received the Sketch of Mr. LIZARS by our talented correspondent EDINENSIS, which shall appear in our February number. Our correspondent justly complains that our "devils take a fiendish glee in compounding blunders on his communications."

We sympathize with him; for with all our care and all our threats typographical errors of a hideous nature do appear, and the best turned sentences are distorted sometimes into downright nonsense. These wicked devils however now appear to be really contrite and promise entire amendment.

We have also received an able article, from PHILANTHROPOS (authenticated) on the subject of providing Hospitals for the sick poor : if possible this article shall appear in our next.

We have likewise received a letter on the same subject with a plan and a statement of the expence of the Native Hospital at Benares from our esteemed friend, J. R.

The authentication of B——'s letter on the Rupture of the Spleen arrived too late to enable us to give insertion to his communication in the present number; it shall however appear in our next.

We beg to acknowledge the receipt of Mr. Middleton's communication from Canton, and return our thanks for the interest he has taken in our labours.

We beg to acknowledge the receipt of our friend Mr. BONSFIELD's communication ; he will understand us when we say "annually."

The letter by *Quis* not *Quiz* has been authenticated: it is a very important question which he has mooted, and shall receive our particular attention.

In reply to a question from Mr. Corbet ;—it is our intention so to arrange our succeeding numbers, commencing from January 1836, as to include the orders from the Horse Guards, and the general orders relating to the medical service of the several Presidencies of India.

END OF SECOND VOLUME.

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THE MEDICAL ADVISER,

NO. I.

ADVICE TO THE STRANGER

ON LANDING

IN INDIA.

The object of these papers is to afford Medical advice, for the guidance of the Missionary, the Indigo Planter, and the Stranger coming to India, by giving a few plain rules by means of which sickness may be prevented or arrested in its progress. Many worthy and excellent men have fallen sacrifice to the ignorance of those remedial measures, the application of which, whilst medical aid was delayed, would have been a guard against the rapid but insidious approach of disease, or enabled the patient to struggle with it for a time and prolong life.

In considering the means of preventing disease upon new comers into a tropical climate, it is supposed that our best guide is to take the general outline of indigenous customs; but before one can become acquainted with these, it will often be found too late. The experience necessary to the acquirement of such a knowledge is purchased in most instances only by a ruined constitution.

To observe attentively the example and conduct of our countrymen long resident in India is the next best practical rule which can be laid down, but it is not always safe; for it is obvious that that which would confer immunities and privileges on these might have the most injurious effects upon the novice and the stranger. There is no similarity of constitution between the old resident and the new comer. That of the latter is marked by promptitude of action, connected with muscular irritability. The solids of his body are denser, and the blood contains more of that principle on which the formation of flesh or solids depends. Before his arrival in this country the discharge or waste of the body has been less, and the absorbents possessed greater energy and strength, and he has been indulging in substantial food and strong drink with impunity; but in India there is no indulging in luxury or other debilitating agents without engendering acute or chronic diseases. Here the circulation of the blood is accelerated, and the strong vigorous pulse of the colder regions no longer exists. Should the stranger arrive during the hot weather, he will find the old resident worn down by lassitude and languor consequent on the excess of heat. The skin has become soft and flabby. The exertions once made with activity are now felt to be irksome, and are performed with difficulty, irritability of temper is increased, impressions are as easily made as they are obliterated. The disposition in many becomes

more quick, acute, and sensible ; and the secretions have undergone remarkable changes.

Thus then this relaxation of the fibres, this weakened and irregular exercise of the functions of the different organs, combine to shew that the new comer must not on any account take the habits of the old resident for his guide. The old resident is for ever having recourse either to blue pills or some specific which are not indispensible for the preservation of the health of the new comer. Moreover it does not follow that because a person has been long resident in India, he has established a judicious system of dietetics, or supposing he has a system of his own for the preservation of health it may spring from guarded measures against prospective evils. Too often indeed the old resident is the very person who will not bear with wholesome restrictions; he indulges in the pleasures of the table, late hours, and even in acts of intemperance which rather augment than check the excitement of heat. He has already become the victim to hepatic affections, which, under such a mode of living, are never failing attendants on a resident under a vertical sun. The old residents are mostly men who have recovered from attacks of acute diseases which have laid within the foundation of valetudinarian constitutions. Undermined as these are, they require a mode of living and management essentially different from that of the new comer who is in the fulness of vigor and health.

But it is a dangerous thing to take the example of any class of men in any town, city, or country for our guide. We must reflect upon the variety of their constitutions, habits, and the circumstances under which they live: the unwholesome repast of some, and the dissipation, habits of indolence, and inaction of others, the example of those who turn day into night and night into day. The excited feelings of hundreds who are pursuing objects of low desires, the innumerable persons who are under the depressing influence of grief attendant upon the failure of concerted plans, projects rendered abortive, and enterprizes counteracted. There are some for instance racked with anxiety in the pursuit of fame, pleasure, or wealth; others weighed down by remorse attendant upon the commission of crime. The corpulent and those of a spare habit, the robust and the weak, the rich and the poor, the inebriate and the sober, are all varieties which would puzzle any man who wished to take a lesson from the example of any. Again the sedentary, the recluse, the philosopher, the ignorant, &c. must also be taken into account. The difference in the const itution of the mind. The joyful and the depressed, the peaceable and the turbulent, the noisy and the pugnacious, the simple and the currency, the quick and the slow, the naturally gay and the melancholy, and a hundred other dispositions which need not more be enumerated. There is in short such a variety of dispositions, inclinations, propensities, powers, and faculties peculiar to and characteristic of individuals as to render the task of judging for one's self from observation on these extremely unprofitable. It is therefore unreasonable and unsafe to be guided solely by observation on the custom and habits of men.

One of the leading and unanswerable arguments to be pleaded against quackery, quack medicines, and specifics for all diseases, is the circumstance dwelt upon in our preceding statement; viz. the great variety and remarkable dissimilarity in the constitutions, dispositions, habits, and passions of men; to which may be added the consideration that some of these by forming a union render the case more complicated. For instance to the strong and robust constitution may be added irritability, &c. which as readily form a union with the weak, relaxed, and delicate. A consideration of these facts in the physical formation of man must convince every reasonable being how necessary it is to become thoroughly acquainted with that knowledge which teaches how far constitutions and habits tend to cause disease, and enables one to ascertain the most judicious modes of prevention, mitigation, and cure.

To proceed then with our subject, it will be necessary to define the diseases to which different constitutions are subject in a tropical climate. We shall consider, in the first place, those constitutions which are supposed to be strong, robust, and irritable. These are subject to all the inconveniences attendant upon repletion and irritability of the nervous system, on which supervene inflammatory diseases of the brain, stomach, and bowels. It therefore follows that exposure to the sun in the least, and living freely must be attended with very serious consequences. It may however happen to robust and strong constitutions, that instead of irritability they may be united with vascular torpidity. When this is the case the constitution is not adapted for a tropical climate; excessive heat aggravates this habit, and if great care be not taken, apoplexy is inevitable: we however do not mean to say that for such a constitution no system of living can be adopted which could prevent this fatal tendency. On the contrary it is our conviction that a beneficial system may be adopted, which it will be the object of these papers to point out: but at the same time, we must add that we have found few in this country, of this constitution, who would submit to the sacrifices necessary for the preservation of health under such circumstances. It is necessary, in proof of this last assertion, to shew the erroneous notion some men of this habit entertain. They think they can eat, drink, and act with impunity, because they possess a strong constitution; but they should bear in mind what Dr. Johnson has very appropriately said in the Rambler, that "those that frequent the chambers of the sick, will generally find the greatest pains and most stubborn maladies, among those whom confidence in the force of nature, formerly betrayed into negligence or irregularity; and that superfluity of strength, which was at once their boast and their shame has often, in the end, no other effect, than that it continues long, in impotence and anguish." There is no question that that close observer of men and manners, Dr. Johnson, had remarked the exposure to all weathers, the excess in living, and indulgence in late hours, and had lived long enough to mark the result to which he has so faithfully alluded. No class of men are so accustomed as medical men to have their disinterested advice disregarded, and themselves often treated with contumely and disrespect, when, in the conscientious discharge of their duty, they endeavour to enforce the salu-

tary precept on the minds of their friends and patients, that there is no one, however strong his constitution, who can indulge in excess of any kind with impunity. It is this very constitution which stands in need of the greatest care in a tropical climate: if any class of people required constant watching as to dietetics and exercise it is this. Hence the greatest mortality in India is among this class of the strangers who come to it.

We have been hitherto considering this constitution in those who move in the higher circles, and whose education and self respect ordinarily keep them within certain bounds of living: but we may illustrate our position by allowing them to possess strong constitutions such as are exhibited in young recruits on their first landing in India who are under no restraint, which respectability and self respect impose. About eighty of the finest, strongest, and healthiest young men we have ever seen in India once landed, and were examined by us, and admitted into his Majesty's service; before however this detachment had been long at its destination at Cawnpore, from twenty to thirty, betrayed into negligence and irregularity, no doubt from a confidence in the strength of their constitution, fell sacrifices to the climate and intemperance. We have therefore, we trust, shewn satisfactorily to our readers that no strength of constitution can enjoy long when subject to impurity, irregularity, and excess in a tropical climate. That state which medical men understand by the term repletion which requires a particular kind of living will be considered in its proper place.

We now proceed to advert to the next kind of constitution which is not plethoric, but which is between the weakly and the strong. This constitution is to be found among young gentlemen who enter the civil or military service. They have not done growing, and having just left scholastic occupations which are of themselves debilitating causes, they are well adapted for entering the climate between the tropics, and nothing but imprudence and irregularity can make the climate of India prejudicial to them. But unfortunately they have scarcely other advisers than their own peers, inexperienced and thoughtless. It is at this period, that the seeds of disease are sown never afterwards to be eradicated.

The other constitutions we are now to consider are of the females, and those advanced in years who come to India. It does not follow that all female constitutions are weakly, but generally they are of delicate habits; when however it is otherwise, the same care must be observed as prescribed for the other sex. But it frequently happens however that people of a weak constitution coming to India, whether it be owing to a sense of their delicacy or consciousness that prolongation of life and present security of health depend upon regularity and care, admit prudential measures for the attainment of these salutary ends. True it is that they ordinarily find the tropical climate, especially in Bengal, congenial to their habits and constitutions: if however there is nothing of the care and prudence to which we allude, a bowel complaint soon follows, and a lingering, or what medical men call, a chronic disease brings them to the grave.

It has been remarked that persons who are at all advanced in years should not come to reside in India, and the great mortality among our prelates, and extensive sickness and ruined constitutions among those on the Bench, are instanced in support of this position. It depends, however, much upon the previous habits of such individuals, and the duties they come out to perform. If the habit, as among the professors of divinity and law, has been sedentary, and they come out to India to perform the arduous duties which attach to the Bench and to the See of Calcutta, a cause is at once developed, why the climate of India has been inimical to these distinguished individuals, and why it also ordinarily has been so to Governors General. But this does not shew that we should lay it down as an incontestible truth that the age advanced to the meridian of fifty or sixty is not fit for a tropical climate.

The climate is certainly not inimical to old age. In various parts of India we have had patients of this description under our care; several of whom are the oldest men in India, so that we are intimately acquainted with habits and constitutions which are developed in age. The constitutions of the individuals we allude to were no doubt originally good. Their habits were those of activity: they rise early, lead regular lives, and never sit up at night, except on some occasion of conviviality on which however we do not believe they were ever betrayed into acts of that intemperance. We can safely say that among all classes of the community according to our experience when men have attained to any great age after a long residence in India, their habits have been regular, which shews that among such constitutions a tropical climate is not inimical to age. Neither is it to infants. To these it is far more congenial than that of Britain. The climate of England is uncertain; frequent changes happen in the weather. The constant drizzling rain and often sudden blasts of cold keen wind are the exciting causes of disease, and produce the most alarming affections of the chest, which is the source of most of the diseases of children in Europe. The frequency of coughs and colds in Britain lays in infancy the foundation of pneumonic affections, asthma, and scrofulous habits; for which, as children grow up, the change of air to a mild warm climate is found indispensable. But diseases of the chest are not the only affections to which children in Britain are liable: there are inflammatory affections of the bowels and stomach, and especially of the joints, such as rheumatic affections, which lay the foundation of gout in after years—a disease scarcely known among the inhabitants of warm climates. This is owing, we may be told, to the difference of living; but East Indians who are rarely affected with gout, live like other Europeans. Why then should they escape this principal disease, if its origin is not to be traced to climate?

In regard to the climate of Bengal, it has been customary to assume, as data, the mortality among children of Europeans in the King's Regiments: but the deductions derived from such a source are calculated to mislead the inquirer. In the first place the mothers of such children are generally ignorant Irish women who seldom out of ten children rear more than two or three. Their errors in feeding, in giving ardent spirits to children, and allowing them to be exposed to sun and rain, are the principal causes of this mortality among their offspring.

The class of persons, whom we consider as affording a proper datum in this regard, are the Conductors and non-Commissioned Staff attached to Fort William. This is a very respectable class of people, whether we consider them in regard to pecuniary circumstances, moral conduct, or education. The mothers have been generally educated at the Orphan Asylum, or brought up with great care in other schools, or in the families of respectable people. These mothers not only pay great attention to the diet, clothing, and health of their children, but frequently educate them as far as reading, writing, and arithmetic. Among this class we have on an average 180 children on whom we alone attend. In the course of the last four years there were two severe visitations from sickness: first from measles and secondly from fever. During that time almost all the children had the measles and with few exceptions the fever also; but during this time we had only three deaths, two from measles; one of them was an infant at the breast teething at the time, and the other received a check of the eruption.

The following comparative tables of casualties in London and Calcutta, taken from the Encyclopedia Britannica (vide article mortality Bills of), and from the late Dr. W. Twining's Statement of deaths among the children in the Upper Orphan School of Calcutta, will better illustrate the effects of the climate of England and Bengal, than any comment that can be made on the subject.

LONDON.				CALCUTTA.			
Age.	*Persons living.*	*Deaths.*	*Rate of Mortality.*	*Period.*	*No. of Children.*	*Deaths.*	*Rate of Mortality.*
6	308	10	1 in $30\frac{8}{10}$	1823	145	1	1 in 145
7	298	7	1 in $42\frac{4}{7}$	1824	162	3	1 in 54
8	291	6	1 in $48\frac{3}{6}$	1825	171	0	0 in 171
9	285	5	1 in 57	1826	176	2	1 in 88
10	280	4	1 in 70	1827	174	3	1 in 58
11	276	4	1 in 69	1828	178	2	1 in 89
12	272	4	1 in 68	1829	178	1	1 in 178
13	268	3	1 in $89\frac{1}{3}$	1830	181	1	1 in 181
14	265	3	1 in $88\frac{1}{3}$	1831	170	0	0 in 170
15	259	3	1 in $86\frac{1}{3}$	1832	162	3	1 in 54
The mean.	280	5	1 in 56	The mean.	163.7	1.6	1 in 102.5

From the above table it appears that the rate of mortality among children in London is 1 in every 56, and in Calcutta 1 in every 102, which shews the climate of Bengal to be just twice as much congenial for children than that of England. In the Mathematical school in Christ's Church Hospital, which has admirable accommodations and good management, the average number of lads between the age of 8 and 16 for 30 years had been 831, and of deaths among them 11 $\frac{4}{5}$ annually, which shews the rate of mortality to be 1 in every 70 $\frac{3}{4}$, and affords a result nearly as favorable to Bengal as shewn by the above table. Our personal observations on one of the largest parish work-houses in London, viz. Gray's Inn Lane, amply confirm the above deductions. After these proofs, founded as they are on facts, not of any accidental nature, but such as have transpired for a series of years, we trust the climate of Bengal will not be considered as less congenial for children than that of Great Britain.

LUNAR INFLUENCE.—There can be no doubt that the subserviency of man to physical influences is greater between the tropics than in the higher latitudes. Vulgar prejudices, love of all that is mysterious, and superstition once induced man to believe in the remote influence of the planets which revolve in the immensity of space. He supposed them to assume towards him aspects and conjunctions either benign or malevolent. As he advanced in knowledge he was able to distinguish between what was true and what was false, and he rejected the latter. It was however amidst a mass of prejudice and superstition that he acquired knowledge and was taught to believe that popular and vulgar opinions were generally grounded on experience and led to some result of practical utility. Thus planetary influence on diseases once imagined to be a vulgar superstition is now established into a truth. Wounds in tropical climates as well as the actions of the body in health and disease are so manifestly affected by the sol-lunar influence, that it is acknowledged on all hands that it would be considered unphilosophical and unprofessional to doubt these facts. In a tropical climate lunar influence is known to be greater in the crisis and exacerbations of disease than in Europe. The phenomena of the origin and duration of fevers appears more especially to be accounted for by this influence. Dr. Balfour was one of the first to attract the public attention to this fact. His own experience had taught him that the influence of the moon at the full and change prevailed in fevers; he declared that at these changes there was constantly occurring some uncommon or adventitious state of the air, which increased fevers and disposed the body to an unfavorable crisis; on the contrary when these heavenly bodies ceased to exert or rather diminished their attractive influence, fevers also diminished and the system was disposed to a favorable crisis. Now in this opinion almost every Medical man who has had any experience must concur: especially in that part of Dr. Balfour's assertions where it is maintained that when the sun during the equinoxes, by approaching the equator, adds his own increased attraction to that of the moon the increase of the tides as well as of violent fevers and mortality occur. But this is not a modern discovery. Hippocrates, who practised in Asia and in Greece and in latitudes still higher than those of Arabia and Persia, observed it, and wrote of it upwards of two thousand years ago.

When we arrived at the Sandheads on our coming to India and the ship got the Pilot, we remember well laying upon the hencoops in a sultry night at the full of the moon. The Pilot warned us of the danger of doing so, and he recounted to the youngsters who had assembled around him the horrific effects of sleeping in the moon, of the number of young pilots he had known to have awakened with contracted arms, distorted mouths, and wry necks; in short he drew lunar influence in such striking colours, that we have never forgotten it. Of course griffins are easily imposed upon. But we shall never learn if we are too incredulous. On this point Dr. Moseley's is the best advice. He observes that whether the excess of credulity, or downright infidelity be most derogatory to science was a question in Physic difficult for medical casuists themselves to determine. Exempt from the prejudice of

extremes, a prudent physician will take a middle course, and arm himself with a certain portion of pyrrhonism upon most occasions :—and particularly in applying the theory and doctrines of those who have furnished the world with histories of spasmodical affections, *Sic veris falsa remiscent.* We however afterwards learnt from the best authority that these spasmodic muscular contractions did take place when persons in our pilot vessels imprudently slept exposed to the influence of the full moon, and the effect of this early Pilot's lesson was to determine us to observe the effects of the moon on disease in our subsequent professional career. The result of that observation has been the conviction, that attention to the physical influence of the moon in a tropical climate is a matter of the deepest importance as regards the prevention and cure of disease. Several medical men in India have published their opinions on this subject. Dr. Dick declares that patients afflicted with various diseases were worse at the full and change of the moon. Dr. Campbell late of the Calcutta General Hospital mentions the case of a rheumatic patient whose moanings accompanied the changes of the moon, upon this patient the diurnal changes were as evident and regular as the diurnal variations of the barometer or the magnetic needle. Dr. Helenus Scott, late of Bombay, declares that the influence of the moon on the human body was observed in all that part of India by the generality of practitioners, the state of the weakly and diseased bodies being most affected by the motions of the moon. Mr. Rattray states that many persons in the Guttal and Jellasore districts, who are troubled with swelling in the legs, generally known by the term cochin leg, and common among the weavers, complained of its recurring with great violence at the full and change of the moon, at these periods being seized with acute pain in the affected limb. Dr. Balfour asserts that the same pernicious influence extends to epilepsy, paralytic affections, headaches, asthma, &c. It is unquestionable however that the attacks, remissions, and postponings of diseases correspond with lunar changes; and we shall point out in the proper place that attention to these changes and the adoption of certain preventive measures are of the greatest importance. The next physical influence we have to advert to, as particularly pernicious in our tropical regions ,is the solar influence.

Solar influence.—On reaching India the new comer is not so sensible of the heat of the sun as the old resident, and is therefore less cautious of exposure and is not induced to use a *Chattah* (umbrella) or go out in a covered conveyance until the fatal effects are developed, either by coup de soleil, inflammatory fever, or a confirmed liver complaint: such was the result on the constitution of that zealous labourer in the missionary field—the late Reverend John Adam, who was of opinion that the advice repeatedly forced upon him by his more experienced friends proceeded from erroneous deductions: he thought that the constitution might be adapted to bear any heat if on our entrance between the tropics we gradually habituate ourselves to exposure. This excellent young man carried these false notions into practice, and therefore, at the onset of his ardent and useful career, fell a victim to the effect of exposure to the sun.

In India there is not so much to be apprehended from the influence of heat, when we are in the shade where many contrivances are made to lessen it, such as punkhas, glass windows, tatties, dress, &c. While on this subject we may allude to that state of the body which is best fitted to oppose the effects of heat. Suppose that we are in a room, and the thermometer stands at 100°. We may feel greatly oppressed from the high temperature. But, if we ask a person in the same room what are his sensations, he will probably answer, that he does not feel it particularly warm; while we ourselves are sensible of such a dry parched skin and dry tongue, that we are exhausted under feelings of oppression. Of two persons of such different sensations, we usually say, " one is of a cold constitution, the other of a warm." But the fact is, both constitutions are alike; but the dress is different. The person not sensible of the heat is clothed next to his skin in flannel, which keeps up a moisture on the skin, and prevents the sensation of excessive heat. His temperature is natural; while the other, not wearing flannel, has nothing to excite moisture; so that the degree of heat indicated by the thermometer must be actually the degree of heat which he might be suffering.

Two medical gentlemen on this establishment have laudably exerted their talents, with considerable zeal and ingenuity, to lessen the effects of heat. Mr. Hough's invention was an excavation of about six feet from the surface of the earth, at the bottom of which he built a tunnel of four feet square. The earth was then thrown over the tunnel, at the extreme end of which a communication of equal dimensions, something like a chimney, was built, about four feet above the earth. The tunnel was then carried about a hundred feet under ground, and opened into some room in the dwelling, the doors of which were directed to be closed; but in the roof there were apertures of different dimensions for the escape of the hot air, as the cold ascended from the tunnel. We had the pleasure of seeing one of these, at Allahabad, as we have described; and when any wind was blowing, it decidedly made the temperature of the room into which the tunnel opened, many degrees less than in any other. The advantages of the invention are obvious. 1st. There can never be drought in the room. 2dly. The temperature must be always equal. 3dly, and finally, the expense is trifling, and the making feasible in every situation. Such a tunnel must be evidently of infinite importance. But while the benefits to be obtained are thus clear, it is likewise obvious, that in calm weather, when there is not a breath of wind, the tunnel is of no use. Mr. Jefferies discovered an improvement in the foregoing, that is to say, not any improvement by which the former was no longer rendered expedient, but one which supplied the desideratum of wind. We had the satisfaction of seeing the apparatus in Mr. Jefferies' own house at Cawnpore.

In a door-way, much broader than the common size, was placed a framework very nearly square: this was something like a venetian door, saving that the venetians were composed of slips of cloth; these acted as valves to the frame or door. Behind the valves was a coarse kind of cotton cloth, of the same size as the framework. Above was a small reservoir for water, which dropped through small apertures on the cloth. Behind the cloth was a square piece of wood or door, of a size little larger than the cloth. A man pulled this towards him, the action of which shut the valves of the framework. It was then let down,

whereby the air, thus cooled, was forced with astonishing velocity into the room, and was circulated into every apartment of the house. Thus as the frame made of wood was pulled open, the valves shut by the power of suction, and the cloth being wetted from the reservoir above, became the medium of cooling the atmosphere: then, on letting down again the frame of wood, which fell with force, the current of cool air was propelled through the valves into the house. This alternate action, as it must appear, produced a delightful temperature, and the apparatus served to supply these pleasant cold currents during calms, and when the weather was oppressive and sultry. We have thus described these two inventions, as we witnessed them ourselves. We do not believe these gentlemen ever published these important discoveries, which are so creditable to them, and invaluable as a means of lessening the physical effects of heat. The Indian public are also under many obligations to Dr. Rankin, physician to the governor general, for an apparatus which exhibits considerable ingenuity in its contrivance. It is generally considered superior to Mr. Jefferies', and has the advantage of being portable. The ordinary method, however, of producing artificial cold, is by tatties; but they are, with few exceptions, adopted only in the Upper Provinces. They are unquestionably desirable in Bengal, and ought to be used.

We are aware of the general objection to the use of tatties, which is, that they are productive of damp, and often induce serious indispositions. The objection however, is groundless. We deny that tatties produce the dampness so much dreaded. Instead of there being a superabundance of moisture, there is a deficiency in the atmosphere cooled by tatties. It is the consumption of moisture that produces the cold; and unless there was a constant supply of moisture to the tattie to renew the consumption, or the evaporation which *takes place at the outer side of the tattie*, cold would not be produced. If, therefore, the effect of the tattie be cold, and if cold be the effect of the consumption of moisture, it would be a new species of logic to say that moisture still existed after it had been evaporated.

The European, therefore, by keeping within the shade, is as capable of enjoying health in India, so far as heat is concerned, as he would be, comparatively speaking, in any other country. The European sojourner of experience and of sober judgment remains within doors during the hottest part of the day or on going out proceeds in a covered conveyance; But it happens that the field for missionary labour is in the middle of the day, at fairs, or at times when hundreds of thousands congregate together at such spots as Gyah, Hurdwar, the confluence of the Ganges and Jumna, at Juggernath, &c. &c. for the purpose of performing sacrifice on occasion of great idolatrous festivals. How can he preach, distribute tracts, and perform his other duties, and yet escape exposure to the sun? No precautionary means have been attempted hitherto, and the result has been that most of our missionaries have died, or suffered so much from broken-down constitutions, that they have been compelled to return to Europe, and thus the main object of their coming out has been frustrated.

APPENDIX TO THE MEDICAL ADVISER.

The following communication has been forwarded to us with the consent of the author by our obliging contemporary of the *Englishman*. The writer is not a Medical man although his letter is full of medical technology which we have interpreted in parenthesis for the better guidance of our non-professional readers, for whose instruction the letter was penned and on whose account we have introduced it under this division of the *Medical Adviser* which we have entitled "Miscellaneous." Under this head we shall be happy to insert Communications of this nature from non-professional correspondents. The number of worms to which A. B. was subject is no uncommon complaint either in India or Europe. Dr. Hooper says that he knew a girl of eight years old, who voided per anum upwards of two hundred in the course of a week. The same intelligent Physician states that to void thirty and fifty is a very common number. The subject of worms will form an article of itself in the *Medical Adviser;* we shall not therefore say more upon the nature of the case at present than what is already advanced. We agree with our correspondent that we should not set down any disease as incurable, because it has not yielded to those medicines which are generally prescribed for it.

To the Editor of the India Journal of Medical Science.

Sir,—During my travels in the country, over no inconsiderable tract of which necessity, and duty have obliged me to roam, it has fallen to my lot to witness amongst the many maladies incident to India, the one distinguished by the faculty arising from the *ascaris lumbricoides*, (a long round worm, a foot in length and the breadth of a goose quill) in a variety of forms. On the first manifestation of the malady, a cure may easily be affected by means of aperients administered at short intervals; and calomel with *scammony* or jalap has been found very efficacious, in expelling such worms and *ova* (eggs) as are formed in the intestines or *mucus*. At an advanced stage of the disorder however, as the *process* of expulsion becomes much more painful, the patient not unfrequently prefers bearing with his affliction, rather than submit to the pernicious effects of *vermifuges* (medicines which procure the evacuation of worms from the stomach and intestines) upon the digestive organs, which are by the use of strong purgatives materially impaired.

For the relief of those troubled with *ascarides* the native *hakeems*, I learn, prescribe a powerful decoction of pomegranate bark, which for its virulency is scarcely equalled by any thing short of a vegetable poison. A trial has also been made with a preparation from the kernel of the *Quisqualis indica*. But I may here observe *en passant* that it is hardly probable that insects bred in bitterness and which have been found in the *ductus communis choledochus* (the common biliary duct which conveys bile) should be poisoned by bitters.

Some years ago when employed at the Kurranta Dhee Depôt being seriously afflicted with this malady, I used to void daily upwards of twenty of these worms, a number from its largeness almost exceeding belief. These would sometimes ascend through the *duodenum* (the first portion of the small intestines) into the stomach and creep out of the mouth and nostrils, at times when I would be insensible of their movements from sleep, languor, and other causes. The medicines that were prescribed for me, I abided by with the exactest punctuality, and also the regimen; but all this was unavailing, and I felt that I was rapidly sinking into an early grave. My malady, thus allowed to grow upon me, began to discover its fatal tendency, by the usual symptoms. Emaciation, a prostration of the system, itching of the nose, restlessness, thirst in the morning, paleness of the countenance with occasional flushing of the face, and other painful affections of the *viscera*, producing languor, fits, and strong intermittent fever. Not knowing how to get

over my miseries, and resolved on some desperate expedient for relief, it occurred to me that I might by the use of some potential and ardent stimulant increasing the action of the intestines at once stifle and exterminate the worms and thus perform a radical cure. To do this the more effectually I determined on munching some sweet-bread previously, so as to allow the *saliva* to flow down to the stomach, and by its saccharine and nutritive character to allure the *ascarides* from the *mucus* which is their nest and stronghold. I did this one morning and after the lapse of a few minutes followed it by half a tumbler of pure brandy! Feeling no bad effects from this, except a passing excitement, I continued the experiment for a time, and a few days found me as well and hearty as I am at this moment and cured of a painful malady from which I had been suffering most acutely for many months previously, notwithstanding all my Doctors' medicines.

I cannot here be supposed to recommend this course to every individual, since its success must materially depend on the constitution and habit of the patient. But if I may be permitted to adduce a moral reflection it is this—if people would but consent to use a little *reason* instead of blindly submitting to old inefficacious prescriptions and precedents they will find it very easy to overcome a number of difficulties and trials, which by the ignorance and self-sufficiency of those placed about them, they have been taught to regard as unconquerable and irresistable without some friendly aid.

Your obedient servant,

Sudder-Street, Chowringhee, July 4, 1835. J. B.

NECESSARY HINTS TO THOSE WHO USE COPPER VESSELS FOR CULINARY PURPOSES.—In domestic economy, the necessity of keeping copper vessels clean is generally acknowledged; but it may not perhaps be so generally known, that fat and oily substances, and vegetable acids, do not attack copper while *hot*; and, therefore, that if no liquid be ever suffered to grow *cold* in copper vessels, those utensils may be used for every culinary purpose, with perfect safety.

Dr. Johnstone relates the shocking case of three men who died, after excruciating sufferings, in consequence of eating some victuals prepared in an unclean copper on board the Cyclops frigate.—Thirty-three other men became ill, and were put upon the sick-list, at the same time, and from the same cause.

Dr. Percival gives an account of a young lady who amused herself, while her hair was dressing, with eating samphire pickle impregnated with copper. She soon complained of pain in the stomach, and in five days vomiting commenced, which was incessant for two days. After this her stomach became prodigiously distended; and in nine days after eating the pickle, death relieved her from her sufferings.

HINT RESPECTING WOMEN'S AND CHILDREN'S CLOTHES CATCHING FIRE.—The females and children in every family should be particularly told and shewn, that flame always tends upwards, and, consequently, that as long as they continue erect or in an upright posture, while their clothes are burning, the fire generally beginning at the lower part of the dress, the flames meeting additional fuel, as they rise, become more powerful in proportion: whereby the neck and head, being more exposed than other parts to the intense and concentrated heat, must necessarily be most injured. In a case of this kind, where the sufferer happens to be alone, and cannot extinguish the flames by *instantly throwing the clothes over the head, and rolling or lying upon them*, she may still avoid great agony, and save her life, *by throwing herself at full length on the floor, and rolling herself thereon.* This method may not extinguish the flame, but to a certainty will retard its progress, prevent fatal injury to the neck and head, and afford opportunity for assistance. A carpet or hearth-rug instantly lapped round the head and body is almost a certain preventive of danger.

TO PROMOTE SLEEP.—No fire, candle, rush-light, or lamp should be kept burning, during the night in a bed-room, for it not only vitiates the air in a very considerable degree, but also disturbs and prevents the rest of those whose sleep is uneasy, particularly the aged. In a dark apartment, sleep generally comes on without much invitation; whereas, any light in the apartment stimulates the brain, and consequently the whole nervous system, and dispels any tendency to repose.

TO PREVENT THE MISCHIEF ARISING FROM THE BITE OF A MAD DOG.—Where the excision of the part bitten can be immediately performed, it is the best preventive of danger, or where the part can be burnt out by the application of a red hot iron, little danger is likely to happen. Nothing else is at all to be depended on.